AN EXPLORATION OF DISSOCIATION IN AUSTRALIA: MEASUREMENT ISSUES, PREDICTORS AND PHENOMENOLOGY

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Declaration

I declare that this dissertation is my own account of my own research and does not contain work that has previously been submitted for a degree at any institution or for publication without due acknowledgement.

I further declare that the ethical principles and procedures specified by the Swinburne University Psychology Discipline’s document on human research and experimentation have been adhered to in the preparation of this report

Signed:

Helene Richardson
Date
ABSTRACT

This project incorporated three related but independent studies examining measurement issues, possible predictors, and processes of dissociation. Study 1 re-investigated the measurement of dissociation by replicating previous studies suggesting there is a pathological dissociative taxon. The sample comprised 602 participants, 322 males from the Austin Repatriation Hospital PTSD treatment program for Vietnam War Veterans (approximate age 50 to 75 years), and 280 participants from clinical and non-clinical sources ranging in age from 17 to 67 years (47 males, $M = 26.98$ years, $SD = 11.72$, and 232 females, $M = 27.97$ years, $SD = 12.99$). The participants completed the Dissociative Experiences Scale (DES). Taxometric analyses, both MAMBAC and MAXEIG, were performed using two possible sets of taxon indicators extracted from the DES, the 8-item DES-T as suggested by the three previous studies, and a novel set of nine amnesic indicators. Contrary to expectations, there was little evidence of a dissociative taxon based on either set of indicators. It was concluded that caution is needed in sub-typing individuals exhibiting high dissociation scores according to the 8-item DES-T, and that there is a need for further research with other samples.

Study 2 investigated possible predictors of dissociation: childhood abuse, particularly sexual abuse, personality, and fantasy proneness, with an emphasis on exploring whether the predictors of pathological dissociation are the same as those for normal dissociation. The sample comprised the 280 participants mentioned in Study 1, who each completed a paper or internet based survey that included demographics, personality, dissociation, childhood trauma, fantasy proneness, and resilience measures. Multiple regression analyses and structural equation modelling (SEM) were conducted. Results showed that childhood abuse, sexual abuse, fantasy proneness, and resilience were direct predictors of dissociation and pathological dissociation. Vulnerable personality only indirectly predicted dissociation. Fantasy proneness mediated the association between childhood abuse and dissociation, and fantasy proneness rather than childhood abuse remained the strongest predictor of both dissociation and pathological dissociation. Resilience was found to reduce dissociativeness, and age differences were found. The patterns across the SEM models comparing dissociation and pathological dissociation suggest that pathological dissociation is not a construct that can be set apart
from normal dissociation, thus adding weight to the findings of the continuum of
dissociation in Study 1.

Study 3 examined aspects of the lived experience of pathological dissociation. There were nine participants (7 females, 2 males, $M = 42.2$ years), four belonging to a non-DID (Dissociative Identity Disorder) group and five who were in a DID group. Each was interviewed and the data analysed using an interpretative phenomenological method of analysis. Evidence of two broad types of dissociation emerged from the data: (a) an absence of connection with reality or an altered state of consciousness; and (b) the presence of another state or personality. Each of the participants reported experiencing the first type, but only those in the DID group reported experiencing the second type. Most participants reported experiencing childhood abuse which underlay their ability to dissociate, and none reported that therapy experiences increased dissociativeness. Triggers of dissociation were emotional responses to internal and external stimuli. Dissociation was experienced as a double bind, unable to be lived without, but difficult to live with. Participants’ stories highlight the fact that “borders” between dissociative degrees of severity are blurred and not clearly defined.

In conclusion, the findings of the current project are consistent with the continuum model of dissociation, and with the traumagenic model of dissociation. However, there are other important mediating factors involved in the development of a dissociative disorder. Fantasy proneness was shown to influence the development of dissociative disorders, and to mediate the association between trauma and dissociation. Vulnerable personality also plays a part, especially neuroticism, which has a strong association with decreased resilience in some individuals. Results also suggest that increasing individuals’ resilience levels has the potential to decrease their dissociativeness and some aspects of fantasy-proneness. The nine qualitative participants demonstrated that the process of dissociation differs markedly between people and there is no simple pathway through which we can catch the lived experience of dissociation. The current project adds incrementally to our understanding of dissociation, and the seemingly polarised views of dissociative aetiology espousing the trauma, adjustment, and personality models are added to and reconciled.
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CHAPTER ONE: OVERVIEW, BACKGROUND, DEFINITIONS AND MEASUREMENT OF DISSOCIATION

1.1 Introduction

The study of the dissociative disorders has become more prominent in recent years in countries such as the USA, The Netherlands, other regions of Europe, and Turkey. Within Australia, dissociation research has been slower to gain momentum, and the current project assists in increasing the momentum already gained by investigating various aspects of the construct of dissociation in an Australian sample.

There are a number of areas of debate concerning the dissociative disorders, two of which are addressed in the current project. The first is about measurement of dissociation and the diagnosis of dissociative disorders. There are those who consider the dissociative construct to be continuous (e.g., Brenner, 1999) and those who consider some aspects of the dissociative spectrum to be taxonic (e.g., Waller, Putnam, & Carlson, 1996). The second area of debate addressed here concerns the aetiology of dissociative disorders. The prevailing view among clinicians and researchers in the dissociative disorders field is that childhood trauma plays a major role in development of dissociative disorders (e.g., Chu, 1998b; Putnam, Guroff, Silberman, Barban, & Post, 1986; Ross, 1997; Ross, Norton, & Wozney, 1989c). An alternative view is that the dissociative disorders, especially Dissociative Identity Disorder (DID), are iatrogenic disorders, created within Western cultures by over enthusiastic therapists and/or societal influences (e.g., Barry-Walsh, 2005; Piper & Merskey, 2004a; Spanos, 1996).

This chapter first presents an overview of the project, the rationale for the project, the research aims, and a summary of the following chapters. A history of the dissociative disorders is then outlined, after which dissociation is defined, and finally issues pertaining to measurement and conceptualisation of dissociation are discussed.

1.2 Overview of the Project

There were three main aims for the project presented in three studies. The first was to investigate the measurement of dissociation using the Dissociative Experiences Scale (DES & DES II: E. M. Bernstein & Putnam, 1986; Carlson & Putnam, 1993), and to replicate prior research findings that found indicators of a dissociative taxon (Waelde, Silvern, & Fairbank, 2005; N. G. Waller et al., 1996; N. G. Waller & Ross, 1997). The second aim was to investigate predictors of dissociation. These included childhood
trauma and a number of lesser-researched areas: (a) fantasy proneness; (b) personality; (c) resilience; and (d) age differences. The final aim was to explore the process of dissociation by asking a small selection of participants about their lived experiences of dissociation.

This project is organised in nine chapters and literature reviews related to each of the three studies are presented together in the initial chapters. Chapter 1 introduces the background of dissociation research, the definitions of dissociation, and measurement issues related to the construct. Chapter 2 introduces the examination of the aetiology of dissociative disorders with a discussion about the role of childhood abuse juxtaposed with other theories relating more to the role of person and sociocognitive variables. Chapter 3 continues the examination of literature pertaining to the aetiology of dissociative disorders by reviewing personality, fantasy proneness, and resilience and their possible role as predictors. Chapter 4 reviews current literature pertaining to the phenomenology of dissociation and points to the fact that there is a dearth of qualitative research in the dissociative field. Chapter 5 briefly gives the overall aims of the current project.

Chapter 6 contains the research aims, method, and results for Study 1, which is a self-report, cross-sectional study designed to test whether dissociation is dimensional or categorical. An exploratory factor analysis of the Dissociative Experiences scale (DES) (E. M. Bernstein & Putnam, 1986; Carlson & Putnam, 1993) is presented, after which taxometric procedures test for taxonicity of the DES, in order to replicate previous studies that found some indicators of dissociation constitute a pathological dissociative taxon (Waelde et al., 2005; N. G. Waller et al., 1996; N. G. Waller & Ross, 1997).

Chapter 7 presents the hypotheses and research questions, method, and results for Study 2. Results include an exploratory factor analysis of the Childhood Trauma Questionnaire (CTQ: D. P. Bernstein & Fink, 1998), and analyses of the predictors of dissociation, including correlations, hierarchical regressions, and structural equation models. Chapter 8 then presents a phenomenological study exploring the lived experience of dissociation. It contains details regarding research aims, methodology, and the results of the qualitative analysis. Finally, Chapter 9 reviews all the main findings of each study consecutively, followed by a summary of the overlap between the studies, the methodological limitations, implications and possible directions for future research including suggestions for further explorations of other predictors of dissociation.
1.3 Background

1.3.1 Historical Accounts of the Dissociative Phenomenon

Knowledge of the dissociative capacity of humans increased in the late 1700’s and early 1800’s when hypnotism began to be used extensively and practitioners experimented with the changed states of consciousness produced under hypnosis (Crabtree, 1985). It was noticed that, in a hypnotic state, individuals exhibited a consciousness unlike the normal waking self, which had characteristics of a separate personality. In addition, according to Crabtree, this “hypnotic self” (p.22) was usually aware of what the individual did as “the waking self” (p.23), but the waking self often had no recollection of what occurred in the hypnotic trance. Through experimenting with hysterics in the 1880s and 1890s, two of the main researchers in this area (Binet and Janet) found that the hypnotic self has a continuous parallel existence alongside the normal waking consciousness. Those diagnosed with hysteria were thought to be in “a state in which certain fragments of personal experience become split off from the consciousness of an individual, manifesting themselves in bodily symptoms such as paralysis of an arm, a leg, or one whole side of the body; blindness or deafness in one or both organs; [and] numbness of the skin in various regions of the body” (Crabtree, 1985, p.23). According to Crabtree, Binet discovered that “the second self…takes over…certain parts of the body from which it has forced the normal self to withdraw” (p.24)

By 1880, this phenomenon of divided consciousness was among the most discussed by psychiatrists and philosophers, with several theories expounded explaining these dissociative phenomena (Ellenberger, 1970). Then between 1910 and 1980, the dissociative phenomena and associated conditions were rarely recognised or diagnosed. After 1980 an exponential increase in the study and diagnosis of the dissociative disorders has occurred worldwide (Putnam, 1995).

1.3.2 Dissociation Research Prior to 1980’s

1.3.2.1. Up to 1910.

Knowledge of dissociative phenomena has been part of Western medical tradition dating back to the Greeks (Putnam, 1995; Ross, 1997), and has been known about from before the 4th century BC (Ross, 1997). Culturally determined variants of dissociative processes (e.g., possession states, conversion symptoms, sleep walking,
somnambulism, and religious healing) have reportedly been widely distributed throughout all societies and cultures across the centuries, and still are today (Putnam, 1995).

An early discovery that initiated the study of the dissociative mind was by a physician, Mesmer (1734-1815). Mesmer discovered ‘animal magnetism’ in 1775, which is one individual’s ability to influence the magnetic balance of another individual in order to cure certain ailments (Crabtree, 1985). In 1784, Mesmer’s student Puységur accidentally discovered ‘magnetic sleep’ when he was unable to waken one of his patients. The patient had entered into an altered state of consciousness in which he exhibited unusual phenomena, such as responding to commands that the waking state of the patient knew nothing about. With this discovery, Puységur was subsequently able to demonstrate the complete separation between two states of consciousness, later termed the hypnotic self and the waking self, or double consciousness (Crabtree).

As mentioned, the dissociative phenomena then began to be more rigorously researched in individuals diagnosed with hysteria (Crabtree, 1985). An early explanation for hysteria came from a myth about a woman’s desperate need to child-bear. It was believed a uterus was required to have hysteria. Therefore, men could not have hysteria. This belief changed when the disease was recognised in men, and this led to more precise clinical studies. Jean-Martin Charcot (1835 - 1893) is credited with giving this precision to the knowledge of hysteria (Janet, 1905/1965).

Once hypnotism became accepted practice, work into the nature of the second self became more common in the 1880’s (Crabtree, 1985). This led to a proliferation of studies about the dissociative phenomena carried out by early clinicians such as, Charcot, Bernheim, Liebault, Janet, Binet, Prince, James, Jung, Breuer, and Freud, who all made contributions to the study of dissociative disorders through their research with “hysteric” (Ross, 1997). Binet viewed the doubling of consciousness as a common clinical mechanism, and using hypnosis he demonstrated that many symptoms, such as amnesia and automatic writings were associated with double consciousness and that this doubling was the basic mechanism in forming these symptoms (Ross).

Janet, however, is attributed by many writers with being the originator of the concept of dissociation (or disaggregation as he first called it) (see Hilgard, 1973a, 1977/1986), and was the first to coin the word ‘subconscious’ (Ellenberger, 1970). The term dissociation was derived from the word association, which referred to the idea of memories being brought to consciousness through a process of association of ideas. If
these memories could not be accessed by association, they were then thought to be disassociated (Hilgard, 1973a, 1977/1986). From work with his hysterical patients, Janet (1901/1998, 1905/1965) described symptoms of hysteria, such as, localised amnesias, alternating memory, irresistible suggestions, hypnotic catalepsias, and of “total modifications of the personality divided into two successive or simultaneous persons, which is...the dissociation in the hysterics” (p.4).

Breuer and Freud (1895/1974) also worked with hysterics. They originally agreed that the symptoms of dissociation were linked to sexual abuse (Freud’s ‘seduction theory’). However, in 1905 Freud publicly rejected this seduction theory (Masson, 1984). Freud then proposed a new theory of complex metapsychology that was the basis of psychoanalytic theory. At the same time as Freud’s rejection of the seduction theory, the use of hypnosis as a therapeutic tool fell out of favour along with the diagnosis and treatment of hysteria (Ross, 1997).

However, before the study of dissociation became a rarity in 1910, Spiegel and Cardeña (1991) note that a tradition was established in 1906 by the Journal of Abnormal Psychology, founded by Morton Prince (1854-1929), who himself was the author of a classic study on multiple personality (Prince, 1906a). The first edition of the journal contained

…19 articles by some of the most important figures in psychology at the turn of the century (Pierre Janet, Vladimir Bechterew, Boris Sidis, Edouard Claparede, James Angell, Morton Prince, and Carl Jung). Of these articles, 3 are devoted to dissociative phenomena, 2 to hypnosis, 4 to hysteria, 1 to the ‘feeling of unreality’ and to apparent subconscious fabrication. (D. Spiegel & Cardeña, 1991, p.366)

1.3.2.2. From 1910 to 1980.

Very little was written or researched about dissociation from 1910 to the early 1970’s. Hilgard (1973a) states that the concept of dissociation was so plausible and widely accepted in the 18th and 19th centuries that it is puzzling why it declined as it did. He suggests that the decline of interest was probably more a reflection of social history than it was of scientific advance. It seems Freudian concepts were the predominant interest, with the main area of division between Janet’s doctrine of dissociation and Freud’s doctrine of repression. Although both processes assume the existence of a psychological subconscious that can deny certain memories access to conscious
awareness even while exerting influence on ongoing experience and action, these two concepts were different in the minds of Janet and Freud (Kihlstrom & Hoyt, 1995). According to Kihlstrom and Hoyt, Janet viewed repression as a special form of dissociation in which the denial to conscious awareness was more a defence mechanism. In contrast, Freud viewed dissociation as inconsequential and repression as a separate process with its own ontological status. However, after 1910, MPD was increasingly thought to be produced by a naïve interaction between therapist and patient, that is, produced iatrogenically using hypnosis (Ross, 1997).

In addition, Bleuler introduced the term “schizophrenia” to psychiatry in 1910 (Rosenbaum, 1980). According to Rosenbaum, this had an important impact on the decline of reporting of MPD. So, after 1910, patients who were not classified as oedipal hysterics, were much more likely to be diagnosed as schizophrenic leading to an upsurge in the popularity of schizophrenia as a diagnosis (Ross, 1997).

In contrast, Hilgard (1974) believes the decline in MPD diagnoses after the 1920’s was facilitated by two things: (a) the upsurge of interest in psychoanalysis, through Freud, which substituted repression for dissociation, and (b) the rise of interest in behaviourism in the first half of the twentieth century under the influence of Pavlov, Watson and Skinner.

However, there were a few published articles about dissociation during the first half of the 20th century. Hilgard (1973a) found 20 indexed abstracts between 1927 and 1936, eight to 1946, and then five for the 1950’s and 60’s. In addition, there were 33 cases of MPD reported worldwide from 1901 to 1944 and only 14 from 1944 to 1969. Then from 1971 to 1980, there were 50 reported cases of MPD (Greaves, 1980). Another author found 29 more cases of MPD, published in 16 papers prior to 1981 (Boor, 1982). Then between 1970 and 1979, there was a remarkable increase in the diagnosis and reporting of cases of MPD (Boor, 1982; Greaves, 1980). Furthermore, considerable rising public interest began in the 1970’s because of a number of books written about the disorder around that time (e.g., Sybil, by Schreiber, 1973) (Lovinger, 1983). Also, in the 1970's Hilgard (1973b) inaugurated the modern study of dissociation using experiments such as cold pressor pain, and hypnotically induced analgesia.

Hilgard (1977/1986) developed his own Neodissociation theory, which used the concepts of hypnosis to assist in explaining dissociative processes (see also Hilgard, 1973a). Three other factors also assisted Hilgard in his discoveries about dissociation. They were: (a) the revival of interest in hypnosis after WWII; (b) the increased interest
in traumatic stress after the Vietnam War; and (c) the prevalence and effect of child abuse and incest, highlighted by the Women's Movement in the 1970's (Herman, 1997; Parker & Parker, 1986). While Hilgard did not specifically deal with the dissociative disorders, his theories and findings shifted the study of dissociation from being hypothetical to a more clinical, experimental and theoretical reality (Bob, 2003).

1.3.3 Dissociation Research Since the 1980's

In 1980, there were two important developments in the field of dissociation (Ross, 1997). Dissociative disorders were given official diagnostic status in the DSM-III (American Psychiatric Association, 1980), and there were four important papers published in leading psychiatric journals (Bliss, 1980; Coons, 1980; Greaves, 1980; Rosenbaum, 1980). These four papers reinvigorated the study of the dissociative disorders and proposed possible aetiological pathways for their development. Rosenbaum’s paper was different from the other three, in that he proposed that the introduction of the term “schizophrenia” by Bleuler in 1910 resulted in many multiples being (often wrongly) diagnosed and treated for schizophrenia. He stated this was one reason why the reporting of MPD cases had declined so dramatically up to the 1970s. The other three authors, however, defined MPD and also outlined characteristics of MPD. The essence of the definitions were outlined by Greaves: (a) that “two or more personalities [exist] each of which is so well developed and integrated as to have a relatively coordinated, rich, unified, and stable life of it’s own” (see also Taylor & Martin, 1944, p.282); and (b) “significant alterations of personality…loss of self-reference memories and confusions and delusions about particular identity in time and place” (Greaves, p.581).

Greaves (1980) also differentiated MPD from hysteria while conceding that they have similar features, such as dissociation, fugue, and somnambulism. He argued that MPD was more complex than hysteria. In addition, Bliss (1980), Coons (1980) and Greaves reported that trauma seemed to be a necessary antecedent to developing multiple personalities, but not the only precipitating factor. Other factors noted were: (a) an unrecognised abuse of self-hypnosis by those with MPD; and (b) an environment of extreme ambivalence, for example, one actively abusive parent and one passively onlooking parent. Greaves also stated that the presence of trauma is a necessary, but not a sufficient condition, for the formation of alter selves. He suggested further that there
might be a constitutional or temperamental hypersensitivity to trauma, thus introducing the possibility of several factors that influence the formation of alter personalities, not trauma alone.

In 1983, Putnam, Guroff, Silberman, Barban, and Post (1986) reported on the clinical phenomenology of 100 cases of MPD at the American Psychiatric Association. This was the next important step in the history of the dissociative disorders, and began the transition from anecdotal information to valid, reliable diagnosis and clinical assessment. Thus began an exponential increase in the rate of research, diagnosis, and reporting of MPD (Ross, 1997).

During 1983 and 1984, four scientific journals published special issues on MPD. This marked the transition from the pre-scientific to the scientific era in MPD research. In March 1988, the first journal devoted exclusively to the dissociative disorders was established with Richard Kluft as editor (Dissociation, Vol. 1 (1) January 1988). It consisted of articles that contained data about the characteristics of larger numbers of people, their clinical features and treatment responses. Six scholarly books on MPD were published in 1985 and 1986 in North America. In addition, the first diagnostic instruments to measure dissociation, and to make dissociative diagnoses, were published during this period. These instruments enabled the standardisation of research and diagnosis across researchers and clinicians (Ross, 1997).

These early years of the 1980’s seem to have been important in laying a foundation for the study of the dissociative disorders. By 1984 a relationship between MPD and severe and chronic childhood trauma had been documented by a number of authors (e.g., Stern, 1984; Wilbur, 1984). Putnam et al.’s (1986) later review of the clinical phenomenology of 100 diagnosed cases of MPD showed that 83% of the cases reported sexual abuse in childhood; 68% reported that the sexual abuse was in the form of incest. Seventy five percent of the patients reported physical abuse and 68% reported experiencing both physical and sexual abuse.

Another event that influenced the increasing interest in the dissociative disorders was the establishment of the Chicago Conferences from 1984 to 1994. Out of these conferences came the formation of the International Society for the Study of Multiple Personality and Dissociation (ISSMP&D), which was renamed the International society for the Study of Dissociation (ISSD) in 1994. Guidelines for the treatment of dissociative disorders were issued in 1994 by the ISSD (Ross, 1997). Another important factor in the 1980’s and into the 1990’s was the development of treatment and research
centres in the US and Canada for traumatised patients with MPD/DID (Chu & Bowman, 2000; Ross, 1997).

In the late 1990’s, membership of the ISSD increased internationally. The publications about DID began to come from many sources with divergent points of view. The latter was made possible, in the main, by the publication of the Dissociative Experiences Scale (DES) (E. M. Bernstein & Putnam, 1986). In 2002, the official journal of the ISSD changed from *Dissociation* to the *Journal of Trauma and Dissociation* (Chu & Bowman, 2000).

Despite these gains, there is no single, consistent, coherent conceptualisation of the term dissociation on which everyone working in this field agrees (Cardeña, 1994). Cardeña argues there are many taxonomies of dissociation that suggest how dissociation should be viewed, including: (a) a dissociative continuum ranging from normal dissociative processes to pathological processes; and (b) the arranging of dissociative disorders according to type of mental processes not integrated. He proposes a domain of dissociation that can be a way of thinking about dissociation and its related phenomena, with boundaries defining what lies within and without the domain. His domain includes neurological and psychological phenomena, both normal and pathological.

### 1.4 Early Definitions of Dissociation

Early definitions of dissociation were more about the clinical presentation of the disorder hysteria than they were about dissociation itself. Janet (1901/1998) argued that symptoms were vague, there was cerebral exhaustion, and a contraction of the field of consciousness, among other things, but the main symptom was the division of the personality. Janet stated that, “Hysteria is a form of mental disintegration characterised by a tendency toward the permanent and complete undoubling (dédoulement) of the personality” (p.528). Thus, the definitions began to take on the idea of doubling of the personality, in which there is one normal or ordinary personality and a second abnormal personality, different from the first and unknown to the first.

Janet (1905/1965) eventually defined hysteria as “a malady of the personal synthesis…a form of mental depression characterized by the retraction of the field of personal consciousness and a tendency to the dissociation and emancipation of the systems of ideas and functions that constitute personality” (p.332). This definition is not very different from contemporary definitions concerning retraction of field of consciousness, and dissociation of systems of ideas, which seems similar to
compartmentalisation (see section 1.11.2). However, the definitions of hysteria contained the idea that the personal experience that was split off from the consciousness of an individual manifested in bodily symptoms such as paralysis of a limb, or blindness (Crabtree, 1985). These definitions are not unlike contemporary definitions of conversion disorder or somatisation disorder.

**1.5 Current Definitions of Dissociation**

There is no definition for dissociation that has gained consensus within the dissociative disorders field (Cardeña, 1994; Holmes et al., 2005; Putnam, 1996; Ross, 1997; Spitzer, Barnow, Freyberger, & Grabe, 2006). Holmes et al. examined 70 clinical papers for a clear definition of dissociation and concluded that the term ‘dissociation’ refers to different things in various contexts. Ross (1997) “favours a simple definition of dissociation” (p.116), that is, dissociation is the opposite of association. He suggests that the psyche may be reduced to a collection of elements (psychic elements that include thoughts, memories, feelings, motor commands, impulses, sensations, and other constituents of psychic life) in complex relationships with each other. When two psychic elements are in a dynamic relationship with each other, they are associated. If they are relatively isolated or separate, they are dissociated. Daily, the normal mind carries out infinite numbers of associations and dissociations, so according to Ross, dissociation is an ongoing dynamic function of the normal psyche. However, Ross argues that we do not yet have a good definition of dissociation, and notes that this definition refers more to normal everyday experience rather than to pathological experiences of dissociation.

Braun (1986a) also argues that dissociation is a normal part of daily life, but for a normal individual, the dissociative episodes are not likely to become united by a common affective theme and thereby become problematic, which is what seems to happen in pathological dissociation. Braun (1988a) asserts that memories are brought to consciousness by way of association of ideas. He defines dissociation as a severing of the association of one thing from another, but he sees it is an active defensive process. He argues that in psychiatry, pathological dissociation is taken to mean “a defensive process that can intercede between affective states and/or thoughts that are separate from the main stream of consciousness, between parts of behavioural chains, or between affects, behaviors, and/or thoughts” (Braun, 1984, p171). When stressed, the individual separates affect and/or behaviour from the normal flow of consciousness. Again, Braun’s comments do not state what the dissociative process is or define it.
So, what is dissociation? Definitions seem to divide into two types of explanation with: (a) some targeted at the subtle, incomplete coherence of normal dissociation, and (b) some targeted at the marked, motivated discontinuity of pathological dissociation. For the purpose of the present study, the following features of dissociation are noted, as they seem to have a broad consensus across clinicians and researchers.

Normal dissociation appears to include a narrowing of conscious awareness such that surrounding events, environment or people are not noticed or attended to, and/or internal stimuli are not attended to in the usual manner. There is perhaps a momentary loss of time (seconds or minutes). In extreme cases, there is no conscious awareness of current surroundings, and the person is aware of another reality not connected to the current environment. However, there can be parts of consciousness that still attend to activities, such as driving a car, even though there is limited or no conscious awareness of doing so. In addition, it is easy to reconnect to current surroundings (Leavitt, 2001). It is a temporary alteration or separation of what individuals normally experience as integrated mental processes (Butler, 2006).

Dissociation is considered pathological when it begins to interfere with normal daily functioning and larger chunks of time are lost. The maladaptive process, in many cases, is thought to begin in childhood when parts of the self are sectioned off to contain painful memories, which are then unavailable to the individual’s conscious mind. These barriers to knowing are what distinguish normal from pathological dissociation (Peterson, 1991). Some material recorded in memory is not available to recall (Hilgard, 1994). Dissociative disorders are not the result of a brain injury, of disease, or from substance abuse (American Psychiatric Association, 2000). However, the memories are still there, even though sectioned off, and they still subconsciously influence behaviour (D. Spiegel & Cardeña, 1991). The following sections discuss normal and pathological dissociation in more detail.

1.6 Dissociation as Part of Normal Experience

As mentioned above, dissociation in one sense is an integral part of everyday life. We are unaware that we do it (e.g., Butler, 2004; Hilgard, 1977/1986; Peterson, 1991; Pica & Beere, 1995; Ross, 1997; D. Spiegel & Cardeña, 1991; N. G. Waller et al., 1996). In fact, Butler (2006) argues that a large part of the normal individual’s stream of consciousness is taken up with normative dissociative experiences. It seems this capacity
to dissociate in everyday life is present from early childhood. Peterson (1991) asserts that dissociation is a normal experience for preschool children and throughout development. Young children spend much of their time in fantasy play. They have imaginary playmates, their toys are alive and have intentions, and there is a magical quality about death and its permanency.

Ross (1997) maintains that dissociation is a common feature of everyday life, just as anxiety and depression are common features. He argues that a light trance state with diversion of attention from the task is an important aspect of normal mental function that can increase an individual's performance in many tasks, for example: (a) when a person is absorbed in a movie and in an altered state of consciousness; (b) when reading a child's storybook aloud for the hundredth time and blanking out while reading; (c) when driving and not remembering going through the past few sets of traffic lights; or (d) talking on the phone, scanning the newspaper, and stirring the pot on the stove at the same time.

Hilgard (1977/1986) maintains that unity of consciousness is an illusion. We all have divided attention; therefore, we all do more than one thing at a time all the time. This is supported by Morton Prince who stated “…disintegrated personality is no bizarre phenomenon, but in its mild forms an almost every-day clinical affair, though ordinarily, in consequence of the absence of amnesia, it passes unrecognized” (Prince, 1906b, p.187). It seems the ability to dissociate is needed to competently conduct several actions simultaneously (e.g., driving while maintaining a conversation), yet without having any reflective awareness of one or more of them (D. Spiegel & Cardeña, 1991).

Other writers (e.g., Butler, 2006; Dell, 2006a; Holmes et al., 2005; E. C. M. Hunter, Sierra, & David, 2004; Leavitt, 2001) also argue that most dissociative experiences are nonpathological. A large proportion of everyday thought processes, that is, “the stream of consciousness” (Butler, 2006, p.45), is taken up with normative dissociative experiences, such as daydreaming, absorption, depersonalisation, and derealisation, as well as fantasising, and self hypnosis. These everyday experiences all cluster under the rubric of normal or nonpathological dissociation.

Reading novels and magazines, and watching movies, and television all induce altered states related to daydreaming (Ross, 1997). In fact, Butler and Palesh (2004) maintain that movie makers deliberately attempt to create this dissociation for their viewers to draw them into the movie. This normal amnesia or dissociation is the normative dissociative state called absorption, which has been studied by Tellegen and
Atkinson (1974) and others (e.g., Ray, June, Turaj, & Lundy, 1992; Roche & McConkey, 1990; Smyser & Baron, 1993).

Tellegen and Atkinson (1974) describe absorption as “a state of ‘total attention’ during which the available representational apparatus seems to be entirely dedicated to experiencing and modeling the attentional object, be it a landscape, a human being, a sound, a remembered incident, or an aspect of one's self” (p.274). Butler (2004) also defines absorption in a similar manner to Tellegen and Atkinson. It is an …intense focal concentration and cognitive involvement in one (or more) aspect(s) of conscious awareness, resulting in the exclusion (dissociation) of other content from the phenomenal field, and, often, the context in which it is experienced (for example, the loss of self-awareness and self-reflection, the experience of volition, or the experience of relatedness to self or the world).

(Butler. 2004, p.5)

In addition, studies have shown that absorption is experienced by a normal population (Ray et al., 1992), is related to imaginative involvement and openness to experience (Roche & McConkey, 1990), and is not related to disruptions in executive functioning as are dissociative amnesia and pathological dissociation (Giesbrecht, Merckelbach, Geraerts, & Smeets, 2004) (see also section 1.11). Furthermore, some aspects of depersonalisation and derealisation are considered to be within the normal dissociative state (e.g., E. C. M. Hunter et al., 2004), such as: the unreal feeling as one falls asleep; feeling very tired; jetlag; when under the influence of drugs; or unreal feelings during a fever (Ross, 1997).

Many of the dissociations of everyday life are positive and we often seek out dissociative experiences, such as in film, music, religious experience, and yoga meditation (Butler, 2004). Butler and Palesh (2004) assert that dissociation is not only integral to film, but that film-making and the film-watching experience rely on the audience's innate understanding of dissociative phenomena. Additionally, Becker-Blease (2004) claims that music is associated with altered states of consciousness. The religious experience can also be a positive dissociative state as trance is encouraged in religious experience causing the boundary between the perceptually real and unreal to become blurred (Luhrmann, 2004). Waelde (2004) compared the yoga-produced meditational states with dissociative states, as they both involve alterations in consciousness, attention, affect, cognition, identity, and pain sensitivity.
Pica and Beere (1995) argue that the study of dissociation in traumatic circumstances is only part of the picture of dissociation, and does not convey the regularity with which dissociation usually occurs. More than one third of their 90 participants reported experiencing positive dissociation during sports, sexual encounters, prayer, contact with nature, anticipation of good news, hearing good news, acting, hobbies, musical performances, and listening to music. Pica and Beere also found that both low and high dissociators reported these experiences.

Collins (2004b) has also examined positive dissociation during a stressful or exciting activity. She studied the role of ‘peritraumatic’ dissociation during a roller coaster ride and found that the majority of the participants reported experiencing dissociative phenomena, such as distortions in the experience of time and contracted visual field, while on the roller coaster. Therefore, it seems individuals seek out the meditational, and thrill-seeking experiences - perhaps specifically for their dissociative effect. However, Collins and Ffrench (1998) found that, even in a non-clinical population those who are high dissociators tend to use escape-avoidance coping strategies and have an external locus of control. Therefore, it appears even normal dissociation is sometimes associated with less effective ways of coping with stressful events.

1.7 Dissociation as Pathological

Prior to 1980, there was no formal classification or diagnostic system relating to the dissociative disorders, but there were a number of documented classifications, or types, of multiple personality (Ellenberger, 1970). It was in 1980 that the dissociative disorders were recognised as formal diagnoses and these are described in the following sections. It is noteworthy that the following criteria given for the dissociative disorders do not describe pathological dissociation as a variant of normal dissociation.

1.7.1 The Dissociative Disorders: DSM-IV-TR Categories

According to the Diagnostic and Statistical Manual of Mental Disorders (4th ed., Text Revision) (DSM-IV-TR) (American Psychiatric Association, 2000), the essential feature of the dissociative disorders is “a disruption in the usually integrated functions of consciousness, memory, identity, or perception. The disturbance may be sudden or gradual, transient or chronic” (p.519).
The DSM-IV-TR lists five dissociative disorders. These disorders and their criteria are listed in Table 1.1. The dissociative disorders listed in the other major diagnostic system, the International Classification of Diseases, Version 10 (ICD-10) are also outlined below in section 1.7.2. Also included with this dissociative disorders section (DSM-IV-TR categories) are the criteria for Somatization Disorder because Nijenhuis (2004) claims that dissociation pertains to both psychological and somatoform aspects of function, experience, and reactions. This view is similar to Janet’s earlier view of dissociation (Janet, 1901/1998, 1905/1965).

1.7.2 The International Classification of Diseases, Version 10 (ICD-10)

The World Health Organisation (WHO) endorses a different taxonomy from the DSM-IV-TR for the dissociative disorders. In the International Classification of Diseases, version 10 (ICD-10) (World Health Organization, 2007), the dissociative disorders are classified under the Neurotic, Stress-related and Somatoform disorders within the general category of the Dissociative (Conversion) Disorders. They are listed as: dissociative amnesia, dissociative fugue, dissociative stupor, trance and possession disorders, dissociative motor disorders, dissociative convulsions, dissociative anaesthesia and sensory loss, mixed dissociative [conversion] disorders, other dissociative [conversion] disorders (including multiple personality), and dissociative [conversion] disorder, unspecified. The somatoform disorders follow on from the dissociative conversion disorders in the ICD-10, and the Depersonalization-derealization Syndrome is described as a rare disorder and listed under “other neurotic disorders”, not under the dissociative disorders.
<table>
<thead>
<tr>
<th>Disorder</th>
<th>Criteria</th>
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| Dissociative Amnesia             | A The predominant disturbance is one or more episodes of inability to recall important personal information, usually of a traumatic or stressful nature, that is too extensive to be explained by ordinary forgetfulness  
B The disturbance does not occur exclusively during the course of Dissociative Identity Disorder, Dissociative Fugue, Posttraumatic Stress Disorder, Acute Stress Disorder, or Somatization Disorder and is not due to the direct physiological effects of a substance (e.g., a drug of abuse, a medication) or a neurological or other general medical condition (e.g., Amnestic Disorder Due to Head Trauma).  
C The symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning |
| Dissociative Fugue               | A The predominant disturbance is sudden, unexpected travel away from home or one’s customary place of work, with inability to recall one’s past  
B Confusion about personal identity or assumption of a new identity (partial or complete).  
C The disturbance does not occur exclusively during a course of Dissociative Identity Disorder and is not due to the direct effects of a substance (e.g., a drug of abuse, or a medication) or a general medical condition (e.g., temporal lobe epilepsy).  
D The symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning |
| Dissociative Identity Disorder (DID) | A The presence of two or more distinct identities or personality states (each with its own relatively enduring pattern of perceiving, relating to, and thinking about the environment and self)  
B At least two of these identities or personality states recurrently take control of the person’s behaviour  
C Inability to recall important personal information that is too extensive to be explained by ordinary forgetfulness  
D The disturbance is not due to the direct physiological effects of a substance (e.g., blackouts or chaotic behaviour during Alcohol Intoxication) or a general medical condition (e.g., complex partial seizures). **Note:** in children, the symptoms are not attributable to imaginary playmates or other fantasy play |
| Depersonalisation Disorder       | A Persistent or recurrent experiences of feeling detached from, and as if one is an outside observer of one’s mental processes or body (e.g., feeling like one is in a dream). |
**Dissociative Disorder Not Otherwise Specified (DDNOS)**

This category is included for disorders in which the predominant feature is a dissociative symptom (i.e., a disruption in the usually integrated functions of consciousness, memory, identity, or perception of the environment) that does not meet the criteria for any specific Dissociative Disorder.

**Somatisation Disorder**

A A history of many physical complaints beginning before age 30 years that occur over a period of several years and result in treatment being sought or significant impairment on social, occupational, or other important areas of functioning.

B Each of the following criteria must have been met, with individual symptoms occurring at any time during the course of the disturbance (these criteria are elaborated further in the DSM-IV-TR):

1. Four pain symptoms
2. Two gastrointestinal symptoms
3. One sexual symptom
4. One pseudoneurological symptom

C Either (1) or (2)

1. After appropriate investigation, each of the symptoms in Criterion B cannot be fully explained by a known general medical condition or the direct effects of a substance (e.g., a drug of abuse, a medication)
2. When there is a related general medical condition, the physical complaints or resulting social or occupational impairment are in excess of what would be expected from the history, physical examination, or laboratory findings

D The symptoms are not intentionally produced or feigned (as in Factitious Disorder or Malingering)
The dissociative disorders diagnostic criteria in both the DSM-IV and ICD-10 reflect the difficulty the mental health field finds in defining what constitutes the dissociative disorders (Spitzer et al., 2006). Spitzer et al. state that both classification systems agree that dissociation relates to memory (specifically autobiographical memory), consciousness and personal identity. However, the ICD-10 also includes the sensory and motor systems thus giving rise to symptoms that are more aligned to conversion disorders. The DSM-IV, in contrast, confines dissociation to the level of psychic functions and symptoms, and places conversion disorders among the somatoform disorders, while the ICD-10 puts dissociative and conversion disorders within one category independent of the somatoform disorders. These differences add to the debate about what constitutes the dissociative disorders and how they should be categorised.

1.7.3 Criticisms of DSM-IV

The categories and symptoms of the dissociative disorders described in DSM-IV have been criticised (e.g., Coons, 2001; Dell, 2001; Putnam, 2001; Ross, Duffy, & Ellason, 2002; Steinberg, 2001). While the DSM-IV identifies five dissociation-related phenomena (amnesia, alters, flashbacks, voices, and conversion symptoms), it also points to the uncertain prevalence statistics of both dissociative amnesia and DID, which perhaps indicates that there are problems with the diagnostic criteria.

Ross (1997) argues that the DSM-IV definition does not have much empirical support, and arbitrarily limits dissociation to areas concerned only with identity, memory, perception, and consciousness. Similarly, Dell (2006b) asserts there is a large discrepancy between the reported dissociative symptoms in empirical literature and the DSM-IV’s account of the dissociative phenomena of DID. Dell (2002) asserts that empirical literature (e.g., Boon & Draijer, 1993; Coons, Bowman, & Milstein, 1988; Kluft, 1985b; Nijenhuis, Spinhoven, Van Dyck, & Van Der Hart, 1996; Putnam et al., 1986; Ross, Anderson, Fraser, & Reagor, 1992; Ross et al., 1989a; Ross et al., 1990b; Ross et al., 1990c; Schultz, Braun, & Kluft, 1989) provides evidence for at least 21 dissociation-related symptoms in DID patients. These are: memory problems, depersonalisation, derealisation, trance, flashbacks, child voices, persecutory voices,
voices commenting on one's actions, voices arguing or conversing, passive influence experiences, "made" feelings, "made" thoughts, "made" actions, influences playing on the body, thought insertion, thought withdrawal, somatoform/conversion symptoms, identity confusion, disconcerting experiences of self-alteration, time loss, fugues, and finding evidence of one's behaviour for which one has no memory.

Dell (2009) argues that the DSM-IV does not recognise sufficient dissociative symptoms to support the differentiation of separate dissociative disorders, and proposes a reconceptualisation of DID. He also introduces a new diagnosis of “Almost-DID” to replace DDNOS-1 or partial DID. Dell argues that DDNOS exists in the empirical literature and in the minds of clinicians, but has no diagnostic status in the DSM. He also argues that the current diagnostic criteria for DID are minimalist and rely on a second personality being distinct enough to actually be a second personality.

Dell (2009), therefore proposes DID be reconceptualised as Complex Dissociative Disorder I and II. Category I has three multi-level criteria, and category II requires the person to meet two of the three. He suggests that the diagnostic criteria “be based on the two most powerful indicators of dissociation in ego state disorders – influences-from-within and recurring incidents of contemporary amnesia” (p.421) rather than the current “distinct personalities” criterion. With this reconceptualisation, Dell suggests most DDNOS 1b cases would fall within either category I or II of the Complex Dissociative Disorder classification.

1.8 Prevalence/Epidemiology of Dissociative Disorders

Epidemiological studies have examined the prevalence of the dissociative disorders using the DES, the Dissociative Disorders Interview Schedule (DDIS), and the Structured Clinical Interview for DSM Dissociative Disorders (SCID-D) in both general population and clinical samples. Most studies estimate the prevalence of DID apart from the other four categories of dissociative disorders as presented in the DSM-IV. As discussed below, there are concerns about the DES as a measure of diagnosable DID. However, existing prevalence estimates are often based upon the DES and this literature forms an important part of the epidemiological picture.
1.8.1 Non-clinical Populations

General population prevalence has been estimated in several studies (see Table 1.2). It is not easy to compare across studies because each one has a different method of reporting dissociation scores. Sometimes the mean and standard deviation are reported, sometimes the prevalence rate of the different disorders. Where possible, both are reported in the table. Within dissociation research, the most often cited epidemiological study is the Ross et al. (1990a) study which was conducted in Winnipeg, Canada in the late 1980’s. This study by Ross et al. also showed that most people in the general population have very few dissociative experiences, but a few people have many.

According to Ross et al. (2002), the lifetime prevalence of the dissociative disorders in the general population is about 10% with a prevalence of 1% for DID. Across remaining studies, the average prevalence rate for dissociative disorders is 13%, and 7% for DID. It is noted that the Bauer and Power (1995) study seems to be an aberration when compared to the other studies, exhibiting considerably higher scores. This could account for the higher prevalence rate across the studies reported in Table 1.2 than that reported by Ross et al. (1990a).

1.8.2 Clinical Populations

Prevalence studies have been conducted in clinical populations in various countries, but the bulk of research comes from North America (see Table 1.3).

1.8.2.1. Inpatient populations.

The average estimated prevalence rate of patients with a dissociative disorder across 13 studies is 19.5%. The average estimated prevalence rate for DID is 4.7%. In addition, results perhaps depend on the measure used and the locale in which the study was conducted. Results from North America are consistently higher than those from Europe and generally higher for those that use the DDIS as opposed to the SCID-D (Friedl, Draijer, & de Jonge, 2000).
Table 1.2

Studies of the Prevalence of Dissociative Disorders and Dissociative Identity Disorder in the General Population in Nine Countries

<table>
<thead>
<tr>
<th>Study</th>
<th>N</th>
<th>Location</th>
<th>Self report inventory</th>
<th>Structured interview</th>
<th>M (SD)</th>
<th>Dissociative disorder (%)</th>
<th>Dissociative identity disorder (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Ross et al., 1990a)</td>
<td>1055</td>
<td>Canada</td>
<td>DES</td>
<td>-</td>
<td>10.8 (10.2)</td>
<td>12.9 (&gt;20 on DES-T)</td>
<td>?</td>
</tr>
<tr>
<td>(Ross, 1991)</td>
<td>454</td>
<td>Canada</td>
<td>-</td>
<td>DDIS</td>
<td>-</td>
<td>11.2</td>
<td>3.1</td>
</tr>
<tr>
<td>(J. G. Johnson, Cohen, Kasen, &amp; Brook, 2006)</td>
<td>658</td>
<td>US</td>
<td>DES</td>
<td>SCID-D</td>
<td>-</td>
<td>9.1</td>
<td>1.5</td>
</tr>
<tr>
<td>(Maaranen et al., 2005)</td>
<td>2001</td>
<td>Finland</td>
<td>DES</td>
<td>-</td>
<td>8.0 (8.1)</td>
<td>3.4 (&gt;20 on DES-T)</td>
<td>?</td>
</tr>
<tr>
<td>(Şar, Akyüz, &amp; Doğan, 2007a)</td>
<td>628</td>
<td>Turkey</td>
<td>-</td>
<td>DDIS</td>
<td>-</td>
<td>18.3</td>
<td>1.1</td>
</tr>
<tr>
<td>(Vanderlinden, Van Dyck, Vandereycken, &amp; Vertommen, 1991)</td>
<td>374</td>
<td>Holland</td>
<td>DIS-Q</td>
<td>-</td>
<td>-</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>(Vanderlinden, Varga, Peuskens, &amp; Pieters, 1995)</td>
<td>311</td>
<td>Hungary</td>
<td>DIS-Q</td>
<td>-</td>
<td>-</td>
<td>10.6</td>
<td>2.6</td>
</tr>
<tr>
<td>(de Silva &amp; Ward, 1993a)</td>
<td>97</td>
<td>England</td>
<td>DES</td>
<td>-</td>
<td>11.25 (8.68)</td>
<td>16.4 (&gt;20 on DES)</td>
<td>5.1 (&gt;30 on DES)</td>
</tr>
<tr>
<td>(Bauer &amp; Power, 1995)</td>
<td>98 students</td>
<td>Scotland</td>
<td>DES</td>
<td>-</td>
<td>17.7 (11.9)</td>
<td>32 (&gt;20 on DES)</td>
<td>12.2 (&gt;30 on DES)</td>
</tr>
<tr>
<td>(Akyüz, Dogan, Şar, Yargić, &amp; Tutkun, 1999)</td>
<td>994</td>
<td>Turkey</td>
<td>DES</td>
<td>DDIS</td>
<td>6.7 (6.1)</td>
<td>-</td>
<td>0.4</td>
</tr>
<tr>
<td>(Barker-Collo, 2001)</td>
<td>137</td>
<td>New Zealand</td>
<td>DES</td>
<td>-</td>
<td>14.97 (11.09)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>(Xiao et al., 2006)</td>
<td>618</td>
<td>China</td>
<td>DES</td>
<td>DDIS</td>
<td>2.6 (4.3)</td>
<td>0.3</td>
<td>0.0</td>
</tr>
</tbody>
</table>

1 Some studies do not give percentages of those who have a dissociative disorder, only of those who score over 20 or 30 on the DES or DES-T
Table 1.3
*Studies of the Prevalence of Dissociative Disorders and Dissociative Identity Disorder in Inpatient Populations*

<table>
<thead>
<tr>
<th>Study</th>
<th>N</th>
<th>Location</th>
<th>Self report inventory</th>
<th>Structured interview</th>
<th>$M$ ($SD$)</th>
<th>Dissociative disorder (%)</th>
<th>Dissociative identity disorder (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Ross, Anderson, Fleisher, &amp; Norton, 1991a)</td>
<td>299</td>
<td>Canada</td>
<td>DES</td>
<td>DDIS</td>
<td>-</td>
<td>21</td>
<td>3.3</td>
</tr>
<tr>
<td>(Ross et al., 2002)</td>
<td>201</td>
<td>United States</td>
<td>DES-T</td>
<td>DDIS &amp; SCID-D</td>
<td>-</td>
<td>40.8</td>
<td>7.5</td>
</tr>
<tr>
<td>(Saxe et al., 1993)</td>
<td>110</td>
<td>United States</td>
<td>DES</td>
<td>DDIS</td>
<td>-</td>
<td>13</td>
<td>4</td>
</tr>
<tr>
<td>(Horen et al., 1995)</td>
<td>48</td>
<td>Canada</td>
<td>DES</td>
<td>DDIS &amp; SCID-D</td>
<td>-</td>
<td>17</td>
<td>6</td>
</tr>
<tr>
<td>(Latz, Kramer, &amp; Hughes, 1995)</td>
<td>175</td>
<td>United States</td>
<td>DES</td>
<td>DDIS</td>
<td>-</td>
<td>46</td>
<td>12</td>
</tr>
<tr>
<td>(Rifkin, Ghisalbert, Dimatou, Jin, &amp; Sethi, 1998)</td>
<td>100</td>
<td>United States</td>
<td>-</td>
<td>SCID-D</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>(Dunn et al., 1993)</td>
<td>265</td>
<td>United States</td>
<td>DES</td>
<td>-</td>
<td>15.5 (13.2)</td>
<td>27.5 (&gt;20 on DES)</td>
<td>-</td>
</tr>
<tr>
<td>(Tutkun et al., 1998)</td>
<td>166</td>
<td>Turkey</td>
<td>DES</td>
<td>DDIS</td>
<td>17.8 (14.9)</td>
<td>10.2</td>
<td>5.4</td>
</tr>
<tr>
<td>(Friedl &amp; Draijer, 2000)</td>
<td>122</td>
<td>Holland</td>
<td>DES</td>
<td>SCID-D</td>
<td>19.95 (18.13)</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>(Şar et al., 2007b)</td>
<td>43</td>
<td>Turkey</td>
<td>DES</td>
<td>DDIS &amp; SCID-D</td>
<td>23.4 (19.3)</td>
<td>34.9</td>
<td>14</td>
</tr>
<tr>
<td>(Modestin, Ebner, Junghan, &amp; Erni, 1996)</td>
<td>207</td>
<td>Swiss</td>
<td>DES</td>
<td>SCID-D</td>
<td>13.7 (13.5)</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>(Evren, Şar, Karadag, Tamar Gurol, &amp; Karagoz, 2007)</td>
<td>111</td>
<td>Turkey</td>
<td>DES</td>
<td>DDIS &amp; SCID-D</td>
<td>22.9 (16.5)</td>
<td>9</td>
<td>0</td>
</tr>
<tr>
<td>(Xiao et al., 2006)</td>
<td>423</td>
<td>China</td>
<td>DES</td>
<td>DDIS</td>
<td>4.1 (7.5)</td>
<td>1.7</td>
<td>0.5</td>
</tr>
<tr>
<td>(Foote et al., 2006)</td>
<td>231</td>
<td>United States</td>
<td>DES</td>
<td>DDIS</td>
<td>-</td>
<td>29</td>
<td>6</td>
</tr>
<tr>
<td>(Xiao et al., 2006)</td>
<td>304</td>
<td>China</td>
<td>DES</td>
<td>DDIS</td>
<td>4.5 (7.9)</td>
<td>5</td>
<td>0.3</td>
</tr>
</tbody>
</table>

*a Female patients only; *b Male patients only; *c Emergency psychiatric patients; *d Outpatients
1.8.2.2. Outpatient populations.

Only two studies report prevalence statistics for outpatient populations (Foote, Smolin, Kaplan, Legatt, & Lipschitz, 2006; Xiao et al., 2006). They were conducted in two different countries, the United States (Foote et al.) and China (Xiao et al.) (see Table 1.3). In the US sample, 29% received a diagnosis of any dissociative disorders and 6% received a diagnosis of DID, in contrast to the Chinese outpatient population with 5% and 0.3% respectively. Apart from the dramatic difference in prevalence estimates, it is noteworthy that the Chinese outpatient sample scored higher than the inpatient sample for all dissociative symptoms and disorders, and the US outpatient sample also had a higher percentage of diagnosed dissociative disorders than many of the inpatient samples mentioned in Table 1.3. The Chinese outpatient sample also reported significantly more childhood trauma, and more secondary features of DID than did the inpatient sample.

As can be seen from Tables 1.2 and 1.3, the estimated prevalence of dissociative disorders in general populations is considerably lower than in clinical populations. The estimates also appear to be lower in non North American and British countries for both non-clinical and clinical populations. Because of the reported higher prevalence of dissociative disorders in clinical populations, some authors (e.g., Dunn, Paolo, Ryan, & Van Fleet, 1993; Horen, Leichner, & Lawson, 1995) suggest that there should be routine clinical screening for dissociative disorders in all psychiatric clinics.

1.9 Major Clinical Features, Somatoform Symptoms, and Psychobiological Characteristics of DID

Beyond the DSM-IV diagnostic criteria for the dissociative disorders, a number of other features have been noticed by clinicians and researchers in working with DID patients.

1.9.1 Clinical Features of Dissociative Identity Disorder in Adults

Clinicians (e.g., Boon & Draijer, 1993; Brand, Armstrong, & Loewenstein, 2006; Fink & Golinkoff, 1990; Kemp, Gilbertson, & Torem, 1988; Putnam et al., 1986; Ross et al., 1990c; Ross et al., 1989c; Scroppo, Drob, Weinberger, & Eagle, 1998) have noted a number of clinical features that are present at a significantly greater level in those
diagnosed with DID than are present in mixed diagnosis psychiatric control groups. Scroppo et al. argue that this set of clinical features can differentiate DID patients from non-dissociative psychiatric patients. These features are: (a) frequent alterations of consciousness; (b) a very high rate of substance abuse; (c) a history of trance states and sleepwalking; (d) a very high rate of suicidality; (e) an extremely elevated number of First Rank Schneiderian (FRS) symptoms; (f) a more severe and extensive symptomatology and a disproportionate tendency toward multiple hospitalizations, multiple diagnoses, multiple psychiatric-medication trials, and multiple courses of therapy; and (g) dramatically higher levels of reported trauma (childhood sexual and physical abuse, earlier onset, and a much greater total number of episodes of sexual, but not physical, abuse).

Putnam et al. (1986) also noted the numbers of psychiatric symptoms, or multiple diagnoses, reported by clinicians during their first contacts with 100 dissociative patients. They listed 20 diagnoses with the most common being depression, mood swings, suicidality, insomnia, psychogenic amnesia, sexual dysfunction, panic attacks, depersonalisation, conversion symptoms, fugue episodes, and substance abuse. These patients also reported multiple medical symptoms, such as headaches, unexplained pain, gastrointestinal disturbances, unresponsive periods, and nausea and vomiting. All but three of the 100 patients reported significant childhood trauma, with 83% reporting sexual abuse, 75% reporting physical abuse, and 68% reporting both sexual and physical abuse. Putnam et al., using the earlier diagnosis of MPD, also state that the diagnosis is confirmed by the clinician meeting one or more alternate alters, which Putnam et al. argue is the cardinal feature of MPD.

Ross et al. (1989c) also reviewed the phenomenology of MPD (N = 236 MPD cases), and found that over three quarters of the sample reported symptoms such as: extensive sexual and physical abuse as children; being in the mental health system 6.7 years prior to MPD diagnosis; having an average of 15.7 personalities; being highly suicidal; having comorbid disorders such as affective disorders (63.7%), personality disorders (57.4%), anxiety disorders (44.3%), and schizophrenia (40.8%). Boon and Draijer (1993) assessed 71 Dutch inpatients and found that they had spent an average of 8.2 years in the mental health system prior to diagnosis of MPD. Ninety four percent
reported a history of childhood physical and/or sexual abuse, and 80.6% met the criteria for posttraumatic stress disorder. Boon and Draijer concluded that these patients have a stable set of core symptoms similar to patients in North America.

In addition, a variety of psychological tests, such as the Rorschach Test, the Thematic Apperception Test (TAT), and intelligence tests, have been used to ascertain clinical features that differentiate patients with DID from those with other trauma-based disorders and depression (Brand et al., 2006; Silberg, 1998). Brand et al. report that those with dissociative disorders show a greater use of imagination, cognitive complexity, ideational coping style, avoidance of emotion, and greater capacity for self reflection when compared to other patients who have trauma based disorders. In contrast to those with chronic PTSD whose lives are emotionally and socially diminished, Brand et al. argue those with dissociative disorders remain psychologically “alive” in spite of chronic trauma. However, the dissociative patients failed to integrate ideas logically and were unable to perceive conventional reality. Brand et al. suggest that, consistent with the trauma model, those with dissociative disorders use dissociation as a defence mechanism to separate themselves from overwhelming and intrusive traumatic material.

Dell (2006b) also maintains that the subjective phenomenology of dissociative symptoms is always one of intrusion into executive functioning or sense of self by alter personalities. DID is characterised by these recurrent dissociative intrusions into all aspects of executive functioning and sense of self. These intrusions are different from the delusional psychotic intrusions experienced by those with schizophrenia. In DID they are of a non-psychotic nature – the patient notes and describes them but they do not give a delusional explanation for these phenomena. Dell also lists other dissociative symptoms of DID that have been well documented in empirical literature. There are 10 straightforward dissociative symptoms: amnesia; conversion symptoms; voices; depersonalisation; trance states; self-alteration; derealisation; awareness of the presence of other personalities; identity confusion; and flashbacks. There are also three psychotic-like dissociative symptoms: auditory hallucinations; visual hallucinations; and SFR symptoms.
1.9.2 Clinical Features of Dissociative Identity Disorder in Children

Responses and clinical features unique to DID patients have also been found in children and adolescents (Coons, 1996; Silberg, 1998). Using the Rorschach test, Thematic Apperception Test (TAT), sentence completion, drawing tasks, and the age-appropriate Wechsler IQ tests, Silberg tested 60 children admitted to an inpatient psychiatric ward. Thirty were diagnosed with DID, 30 were not. Silberg found that, in the dissociative group, the children were more likely to exhibit the behaviours of amnesia or missing time, forgetting, staring, unusual motor behaviours, dramatic fluctuations, fearful and angry reactions to stimuli, physical complaints during testing, rapid regressions of age level, and expressions of internal conflict.

In addition, test response variables that showed significant indications of dissociation in the dissociative group included images of multiplicity (referring to self as more than one, hearing inner voices, drawings of multiple body parts, twins, etc.), malevolent religiosity, dissociative coping, depersonalised imagery, emotional confusion, extreme dichotomisation (of good and bad images seen together, or quick shifts, e.g., between happy and sad emotions in the stories), images of mutilation and torture, and magical transformation. However, suicidality was not unique to the DID group, nor were sexual references (Silberg, 1998).

Similarly, Coons (1996) noted that youngsters in his sample diagnosed with a dissociative disorder were polysymptomatic with post traumatic, affective and conduct disordered symptoms, as well as dissociative symptoms. They had a number of Axis I and Axis II diagnoses, including affective disorders, posttraumatic stress disorder, drug and alcohol abuse, psychosis, conduct disorder, separation anxiety disorder, attention-deficit hyperactivity disorder, enuresis, oppositional defiant disorder, and eating disorder. A number of personality disorders were also diagnosed. Dissociative symptoms included the usual adult symptoms of amnesia, fugue, depersonalisation, derealisation, trance-like states, inner voices, and changes in personality.

1.9.3 Somatic Symptoms of Dissociative Disorders

A number of researchers contend that there are somatic features associated with DID and the dissociative disorders (e.g., Janet, 1905/1965; Nijenhuis, 2000; Nijenhuis et
The origins for this concept lie in 19th century psychiatry when many authors, for example Janet, focused more on the somatoform symptoms of hysteria than on the psychological symptoms (Nijenhuis, 2000). Alongside the psychological features such as fugues, polyideic somnambulisms (that is, the splitting of from the main consciousness emotional experiences and/or a set of ideas, Northridge, 1924/2000), suggestibility, and double personalities, Janet (1901/1998, 1905/1965) also viewed somatic complaints such as convulsions, paralysis, anaesthesias, visual problems, and visceral problems as hysterical symptoms. Nijenhuis (2004) agrees with Janet’s belief that both particular psychological and somatoform dissociative phenomena are characteristics of hysteria. Nijenhuis contends that, if Janet was right, then these phenomena should be apparent in contemporary cases.

Nijenhuis (2000) reports a strong association between dissociative and somatoform diagnoses, suggesting that dissociation and somatisation symptoms are manifestations of a single underlying factor. Other current clinicians and researchers have also noted somatic symptoms present in their MPD or DID patients (Beere, 1995; Coons, 1988; Putnam et al., 1986). Coons listed many of these symptoms, for example: headaches, conversion symptoms, changes in voice, seizure-like activity, unexplained pain or insensitivity to pain, alterations in handedness or handwriting style, palpitations, alterations in respiration, gastrointestinal disturbances including bulimia and anorexia, menstrual irregularities, sexual dysfunction, and dermatological conditions including unusual allergic responses and differential responses to medication.

Nijenhuis developed a questionnaire to assess somatoform disorders, the Somatoform Dissociation Questionnaire (SDQ-20) (Nijenhuis, 2004; Nijenhuis et al., 1996), a 20-item instrument that assesses somatoform symptoms such as urinary and genital pain/dysfunction, dislike of particular tastes/smells, numbness in parts of the body, pseudoseizures, deafness, blindness, inability to feel pain, changes in perception of sound and distance. Nijenhuis subsequently found that assessing psychiatric patients for somatoform dissociation was an effective way of discriminating between those with DID, DDNOS, and other psychiatric disorders. Somatoform dissociation was extreme in DID, high in DDNOS, and increased in the somatoform disorders.
1.9.4 EEG Coherence and Psychobiological Characteristics

Marked psychophysiological alterations have also been observed in patients with DID (Coons, 1988). Hopper et al. (2002) compared the EEG coherence of five individuals diagnosed with DID with that of five actors matched for age and gender, who acted five alters. There were significant differences in EEG coherence between DID host and alter personalities, with alter personalities exhibiting lower coherence. There were no significant differences between the DID hosts and the actor controls, nor were there significant differences in coherence between the controls’ host and alter personalities. Hopper et al. argue on these data that EEG coherence may be an objective measure of the neuronal cortical connectivity associated with DID.

Reinders et al. (2006) also reported psychobiological differences between alters in DID patients. Different alter identities were found to have different subjective reactions (emotional and sensorimotor), cardiovascular responses (heart rate, blood pressure, heart rate variability), and cerebral activation patterns to trauma-related memory scripts.

1.10 Age and Gender Differences in Dissociation Scores

1.10.1 Age Differences

There is some evidence of dissociation (DES) scores decreasing with age. In one study (Ross et al., 1990a) the 18-29 year age bracket reported a mean of 15.4, while those in the 60-69 age bracket reported mean scores of 8.4. Another study (Ross, Ryan, Anderson, Ross, & Hardy, 1989d) found that the median score on the DES for adolescents was 17.7, for young adult college students it was 7.9, and for the elderly it was 4.8. According to Ross et al. (1989c), scores continue to decline with increasing age after the third decade. The age of 22 is when most college students finish their courses, and Ross et al. suggest that DES scores decline further after young adulthood. In addition, a further study of college students used the cut-off age of 22 years (17-22 years) for this age group, and found a DES mean of 14.6 and median of 11.2 (Sanders, McRoberts, & Tollefson, 1989). On the basis of this literature there seems to be grounds
for comparing younger and older people on their patterns of dissociation, with a cut-off around the age of 22 years.

Spitzer et al. (2003) also found that age correlated negatively with total DES scores. Dissociation scores have also been found to decrease with age independent of cognitive function (Walker, Gregory, Oakley, & Bloch, 1996). Walker et al. suggest that when using the DES for screening, adjustments always need to be made for age. Studies in the Netherlands, Hungary, and Belgium (Vanderlinden et al., 1991; Vanderlinden et al., 1995) also found that dissociation scores, as measured by the DIS-Q (Vanderlinden, Van Dyck, Vandereycken, Vertommen, & Verkes, 1993), were significantly higher for the younger population.

Alternatively, Putnam, Hornstein, and Peterson (1996), using a combined sample, studied age and gender differences in children and adolescents diagnosed with pathological dissociative symptoms (N = 177 children and adolescents, 62 from one sample, M = 10.2 years, 115 from the second sample, M = 11.0 years; there were 114 females and 53 males). For this group, Putnam et al. suggest there are “clinical differences by age and gender in both dissociative symptoms and patterns of comorbidity” (p. 352). In general, they found that older children and adolescents are more symptomatic, that is, are more dissociative with comorbid conditions, than younger children, although this difference was not significant. This trend seems to then reverse in adulthood.

Very few studies, however, have examined the effects of age on dissociation other than to note that dissociation scores decline with age. While most studies such as those above report a decline in older individuals, Kluft (2007) points out that older female psychiatric patients are often not screened for dissociative disorders even though many with DID experience it as a chronic disorder unless successfully treated. If it is the case that older individuals report less dissociative symptoms, it would be interesting to explore this aspect in relation to predictors of dissociation within the current project.

1.10.2 Gender Differences

Studies have found no gender differences in total DES scores (de Silva & Ward, 1993a; Ray et al., 1992; Ross & Norton, 1989; Spitzer et al., 2003; Vanderlinden et al.,
1991; Vanderlinden et al., 1995). However, while a German study \((N = 2,135)\) (Spitzer et al., 2003) found an absence of gender differences in total dissociation scores on the DES, the absorption subscale, and on pathological dissociative symptoms, they found gender differences for the amnesia factor with men scoring significantly higher than women. In contrast, another study found that women generally reported higher scores than men, except for the 30-39 age bracket and the 70+ age bracket (Ross et al., 1990a). As noted above, Putnam et al. (1996) studied age and gender differences in a sample of children and adolescents. They found no significant gender differences in core dissociative symptoms. However, females were more symptomatic than males in anxiety and phobic symptoms, PTSD, sleep problems, somatisation and sexual acting out behaviours. Males tended to have more conduct problems. Those diagnosed with DID/MPD were significantly more symptomatic than those with DDNOS. Putnam et al. reported these findings mirrored results from adult samples. Therefore, while there are perhaps gender differences in reported secondary symptoms, it appears there are no gender differences in reported dissociative symptoms across studies.

### 1.11 Dissociation: Conceptual Overlaps, and Distinctions Between Normal and Pathological Dissociation

As mentioned earlier, the dissociative disorders are functional amnesias in nature and constitute profound alterations in memory and identity that are not the result of organic brain injury or a toxic or metabolic condition. They may be sudden or gradual, transient or chronic (American Psychiatric Association, 2000). The dissociative disorders manifest as an inability of an individual to recall complex behaviour in which he/she has engaged, and typically involve autobiographical information rather than general fund of knowledge, which usually remains intact (Putnam, 2000). Therefore, it seems that amnesia involving forgetting material relating to personal identity and amnesia for certain behaviours and/or events is what differentiates pathological dissociation from non-pathological dissociation (Hilgard, 1994; Putnam, 1997).

Janet’s original contention in the early 1900’s therefore still conveys what is meant by pathological dissociation, namely, the failure of the personal synthesis of meaning structures that enable adaptation to the environment. Janet’s critical
distinguishing factor in diagnosing pathological dissociation was the presence of an amnesia that separated dissociated material from normal waking consciousness (Ellenberger, 1970; Janet, 1901/1998). This argument views the experience of those with pathological dissociation as being qualitatively different from those who are not in the clinical range, that is, pathological dissociation can be distinguished from normal dissociation. In contrast, others such as James (1890/1950), and Prince (1906b, 1919) argued that dissociation is present in everyone to differing degrees. This is the dimensional model that contends it is those individuals at the extreme end of a dissociative trait who experience psychopathology.

It seems there are two elements common to both nonpathological and pathological dissociative experiences. One is a narrowing of the attentional field to concentrate on a narrow range of experience, and at the same time, there is exclusion of other internal and/or external material from conscious awareness, perhaps resulting in a temporary lack of reflective consciousness (Butler, 2006). However, despite the apparent differences between normal and pathological dissociation some research, as presented below, shows there is a fine line between what is normal and what can be classified as a disorder.

The absorption aspect of dissociation is not generally viewed as inherently pathological, but is seen as more trait-like and potentially adaptive (J. G. Allen, Fultz, Huntoon, & Brethour, 2002). It has also been likened to peak experiences (e.g., Collins, 2004b), but in some studies it has also been found to relate to psychopathology (J. G. Allen & Coyne, 1995; J. G. Allen et al., 2002). Allen and Coyne had previously considered absorption to be benign or nonpathological but found that absorption was strongly related to scales indicating severe psychopathology on the MMPI-2 in a sample of traumatised inpatients. These results were replicated with the Brief Symptom Inventory and the Millon Clinical Multiaxial Inventory (MCMI-III) (J. G. Allen, Coyne, & Console, 1997). Therefore, they concluded that in a clinical population, absorption might also be a pathological construct reflecting dissociative detachment that can seriously compromise adaptation (see also J. G. Allen et al., 2002).

Depersonalisation and derealisation are also seen as normal aspects of dissociation (Dixon, 1963; E. C. M. Hunter et al., 2004; Ross, 1997). However, it is
accepted within the dissociative field that elements of these experiences are also part of pathological dissociative experiences, and along with amnesia for dissociated states and identity alteration, are manifestations of a latent class variable, pathological dissociation (Waller et al., 1996; Waller & Ross, 1997). Therefore, what is pathological dissociation and how does it differ from nonpathological dissociation?

While not a definition of pathological dissociation as such, Putnam (1996) states that clinical dissociation is characterised by intense absorption and enthralment, functional amnesias for complex behaviours, extreme depersonalisation and/or derealisation, identity alteration, and feelings of possession. He also maintains that the majority of definitions centre “around the observation that significant dissociation is manifest by a discernible failure in the integration of information, experience, and perception” (p.286). Putnam suggests that the information is available but not readily accessible to the individual, and there are not the usual associations between relevant pieces of information.

In addition to the above, the dissociative process perhaps becomes maladaptive when parts of the self become encapsulated in time and are then cut off from the individual’s conscious awareness; the information is not readily available (Peterson, 1991). This creates barriers to knowing even though information is still attended to and absorbed (Leavitt, 2001). Leavitt argues that these barriers are what differentiate normal dissociation from pathological dissociation. Spiegel and Cardeña (1991) use a different term, “a structured separation of mental processes (e.g., thoughts, emotions, conation, memory, and identity) that are ordinarily integrated” (p.367). However, Spiegel and Cardeña add the idea that the dissociated material can still exert an influence on nondissociated behaviour and experience. It is not completely cut off from the nondissociated parts. This thought is similar to the detachment and compartmentalisation theory, expanded later in this section (R. J. Brown, 2006; Holmes et al., 2005). If dissociated material is compartmentalised, it is still there and is able to exert influence even though not available to conscious awareness. However, if it is not encoded in the first place, it is lost and can never be retrieved or exert any influence.

R. J. Brown (2006) also indicates that the term dissociation, as currently used by many authors, applies to a large range of psychological symptoms, states and processes,
for example, depersonalisation, derealisation, flashbacks, intrusive thoughts/feelings, reduced awareness, absorption, divided attention, psychogenic amnesia, identity confusion and/or alteration, and multiple identities. The continuum or unitary model suggests that these phenomena are all qualitatively similar with the difference between them depending only on the amount of dissociation involved in each case. This notion underlies the development of the DES (E. M. Bernstein & Putnam, 1986) that is used extensively in research and clinical practice to estimate individual differences in “trait” dissociation. Research has shown that DES scores predictably vary amongst different clinical groups, with the highest DES scores associated with the more pathological conditions, such as DID (e.g., van Ijzendoorn & Schuengel, 1996).

However, contemporary researchers (Waller et al., 1996; Waller & Ross, 1997) argue that Janet’s original conception of dissociation is the preferred view. Waller et al. contend that pathological dissociation is qualitatively distinct from normal, or nonpathological, dissociation and those experiencing pathological dissociation can be distinguished from the normal population. Dell (2006a, 2006b) agrees that dissociation consists of two qualitatively different constructs.

Nijenhuis (2004) also contends that those experiencing pathological dissociation can be categorically distinguished from the normal population, but he argues that current work in the dissociative field has tended to ignore the early researchers, such and Janet and Charcot, who also included a wide range of somatoform symptoms as characteristic of their hysterical patients. Nijenhuis has taken these original symptoms (mental stigmata, or permanent symptoms, and mental accidents, or acute accidental symptoms) from Janet’s early writings (1901/1998, 1905/1965) and added contemporary clinical observations to develop the Somatoform Dissociation Questionnaire (SDQ). Studies have shown that the dissociative disorders are highly characterised by somatoform dissociation (e.g., Nijenhuis et al., 1999), therefore, it seems a definition of pathological dissociation needs to include somatoform dissociation.

In a similar vein, Holmes et al. (2005) and R. J. Brown (2006) argue that, although it is useful to conceptualise dissociation as a continuum, using the one term for a whole set of dissociative phenomena creates considerable confusion. Holmes et al. argue that the definition of dissociation on which the unitary model is based is too broad.
and hides the fundamental differences between the various dissociative phenomena. Based on the work of a number of authors (J. G. Allen, Console, & Lewis, 1999; R. J. Brown, 2002; Cardeña, 1994; Putnam, 1997), Holmes et al. and Brown suggest there is a better method of classifying or defining dissociation more distinctly, that is, into the two qualitatively different categories of detachment and compartmentalisation, each with distinct definitions, mechanisms and treatment implications.

1.1.1 Detachment

Detachment, according to Holmes et al. (2005) and R. J. Brown (2006, p.12), is “an altered state of consciousness characterized by a sense of separation (or ‘detachment’) from aspects of everyday experience”. It incorporates depersonalisation, derealisation and similar phenomena such as out-of-body experiences. The individual experiences an altered state of awareness or consciousness that incorporates a sense of separation from the body (out-of-body experiences), or from their sense of self (depersonalisation), or from the external world (derealisation) (see also J. G. Allen et al., 1999; D. Baker et al., 2003; R. J. Brown, 2006; Butler, Duran, Jasiukaitis, Koopman, & Spiegel, 1996; Sierra & Berrios, 1998). These forms of dissociation can also occur in combination, and can be acute temporary experiences or become more severe chronic conditions.

Holmes et al. (2005) suggest that detachment phenomena perhaps exist along a continuum of severity, with associated functional impairment. One end would encompass the transient states of detachment that cause little distress (e.g., fatigue or mild intoxication), while at the other end would be the persistent, highly unpleasant states of detachment, such as experiences of almost complete mental blankness. J. G. Allen et al. (1997) suggest that symptoms at the severe end of dissociative detachment are conducive to psychotic symptoms and personality decompensation due to the loosening of the connections between inner and outer reality. J. G. Allen et al. (1999) also suggest that severe dissociative detachment is associated with irreversible memory impairment as a result of failure to encode ongoing experience in patients with posttraumatic disorders.
1.11.2 Compartmentalisation

Compartmentalisation, on the other hand, is characterised by four phenomena: (a) a deficit in the ability to deliberately control processes or actions that would normally be amenable to such control; (b) this deficit cannot be controlled by an act of the will; (c) the deficit is reversible in principle; and (d) the compartmentalised processes, or disrupted functions, continue to operate normally and continue to influence cognition, emotion and function (Holmes et al., 2005). This last point, the preservation of apparently disrupted functions, is one of the major differences between detachment and compartmentalisation phenomena. The disorders encompassed by this definition are dissociative amnesia, fugue, DID, and the various physical symptoms characteristic of the conversion disorders and some, but not all, somatoform disorders. In addition, R. J. Brown (2006) includes ‘made’ actions (actions that the individual does not feel they are controlling) to the original Holmes et al. (2005) model of compartmentalisation.

van der Hart et al. (2004) agree that there is a qualitative difference between detachment and compartmentalisation, and argue that imprecise conceptualisations of dissociation hinder the understanding of what they term “trauma-related dissociation”. Absorption, spaciness, daydreaming, imaginative involvement, altered time sense, and trancelike behaviour are all alterations in consciousness. They can occur in both quality (level of consciousness) and quantity (field of consciousness), can be normal or maladaptive, are prevalent in non-traumatised populations, but do not include a structural dissociation of the personality, which “likely involves divisions among at least two psychobiological systems, each including a more or less distinct apperceptive centre, that is, a dissociative part of the personality” (van der Hart et al., 2004, p.906).

However, van der Hart et al. (2004) argue that “true” traumatic dissociation incorporates amnesia, but not absorption, and includes a structural division of the personality. They claim that limiting the concept of dissociation to this structural division of the personality creates a separation from the related but non-dissociative phenomena and allows for a number of outcomes: (a) it provides a taxonomy of dissociative symptoms; (b) it suggests a common psychobiological pathway for trauma-related disorders; and (c) gives an explanation about how trauma-related dissociation is maintained, that is, by integrative deficits and phobic avoidance. This theory of
structural dissociation of the personality fits with earlier definitions of DID, including Janet’s (1901/1998) idea that there are “two psychological existences successively alternating” (p.491) that remain independent of each other.

A number of researchers have attempted to define normal dissociation as distinct from pathological dissociation (e.g., Butler, 2006; Leavitt, 2001). Butler argues that the term nonpathological dissociation “implies a change in the state of consciousness that is not induced organically, does not occur as part of a psychiatric disorder, and involves the temporary alteration or separation of what are normally experienced as integrated mental processes” (p.45). Similarly, Leavitt (2001) states that normal dissociation implies a narrowing of the attentional span applying to information entering from both external and internal sources. Connection with the surrounding environment can be partially or fully lost and the input of myriad sensations from the environment is not noticed. This type of dissociation is not usually distressing and reconnection with the environment is not usually problematic. Leavitt’s definition is similar to Tellegen and Atkinson’s (1974) definition of absorption.

While it seems this capacity to dissociate in everyday life is present from early childhood, a child may learn over time to use the dissociative process together with primitive defence mechanisms to block off very painful memories, and eventually, this may become a preferred response to overwhelming emotional traumas. This process may lead to the development of new and distinct parts of self, encapsulated in time, and cut off from the rest of the individual’s consciousness. It may, then, become a maladaptive or pathological process (Peterson, 1991).

There seem to be two views as to whether normal dissociation can become maladaptive or not. Leavitt (2001) suggests that those who engage in higher levels of normal dissociation may be robbed of the ability to stay in contact with knowable experiences. Events that are missed can remain forever outside the sphere of knowing. This can lead to individuals becoming socially dysfunctional because they fail to notice environmental and social cues. Leavitt differentiates normal dissociation from pathological dissociation. He believes there are barriers to knowing in pathological dissociation even though information is attended to and absorbed.
However, de Ruiter, Elzinga and Phaf (2006) suggest that high dissociators have higher levels of elaboration learning and reconstructive retrieval for which they need higher levels of attentional and working memory. De Ruiter et al. argue that these characteristics are representative of a higher ability to re-construct conscious experiences. They conclude that high dissociators have heightened levels of attention, working memory and episodic memory. These dissociative abilities may benefit these individuals in nonpathological conditions.

To conclude this section, it is evident that nonpathological dissociation is a normal part of everyday existence. Its pervasiveness in the general population is unknown on an individual level, but it is assumed that the operation of normal dissociative phenomena varies from individual to individual (Leavitt, 2001). Research shows that dissociative experiences are common in the general population, and, like anxiety and depression, only become a psychiatric disorder when they cause marked distress and begin to interfere with everyday functioning (e.g., Ross et al., 1990a). The following section introduces the scales and structured interviews used to measure and diagnose dissociation and the dissociative disorders.

**1.12 Measurement and Assessment of Dissociation**

**1.12.1 Self-Report Measures**

A number of instruments have been developed to measure and diagnose dissociation and the dissociative disorders. The best known and most widely used of these is the Dissociative Experiences Scale (DES; DES-II: E. M. Bernstein & Putnam, 1986; Carlson & Putnam, 1993) (see Appendix A1). A key feature of the DES is that it measures dissociative levels and screens for the presence of dissociative disorders. This was the first recognised reliable measure of dissociation, and since its development research into the dissociative disorders has proliferated. The diagnostic interviews require more time of both the interviewer and patient, but are more reliable in the diagnosis of dissociative disorders than is the DES and other self-report measures. However, the DES is one of the easiest, quickest, and most reliable tools for clinicians and researchers to use for investigating and screening for dissociation (Ross, 1997).
The DES is a 28-item brief self-report measure assessing the frequency of dissociative experiences in daily life. Its items were developed from interviews conducted with individuals who had met the DSM-III criteria for dissociative disorders as well as from consultations with expert clinicians in the treatment of dissociative disorders. The items all related to experiences of disturbances in identity, memory, awareness, and cognition, and feelings of derealisation or depersonalisation or associated phenomena such as déjà vu and absorption. Items of dissociation that might be confused with alterations in mood or impulse associated with affective disorders were excluded (E. M. Bernstein & Putnam, 1986). The scale as developed originally was not intended to be used with normal (non-clinical) populations, although it has been successfully used that way (e.g., Collins, 2004a; Ross, Joshi, & Currie, 1991b); neither was it intended to be a diagnostic instrument (Carlson & Putnam, 1993). Nonclinical individuals typically score at the low end of the scale and the differences in their score may not be meaningful.

Within the DES items as conceptualised at the time of development, there were three main themes: (a) amnesia experienced in either of two ways; first finding evidence of engaging in complex behaviour with no memory of doing so, and second “coming to” in the middle of an activity with no recollection of how they came to be involved; (b) depersonalisation/derealisation, experienced as out-of-body experiences or sensory disturbances; and (c) absorption experienced as loss of connection with current surroundings (Waller et al., 1996).

Some exploratory factor analytic findings support these three themes. For example, Carlson et al. (1991) in a large sample, both psychiatric and non-clinical, found three factors that accounted for 49% of the variance in the scores: (a) Factor one, amnestic dissociation; (b) Factor two, absorption and imaginative involvement; and (c) Factor three, experiences of depersonalisation and derealisation. Three factors were also found when analysing the scores of the non-clinical participants, but the item loadings were different (Carlson et al.). Other studies have also found three similar factors in both clinical (Ross, Ellason, & Anderson, 1995) and non-clinical samples (Ross et al., 1991b; Sanders & Green, 1994).
Stockdale, Gridley, Balogh, and Holtgraves (2002) conducted a confirmatory factor analysis and also found that a three factor model best fit the data. They suggested that the clinical relevance of finding three factors was in assessing people on the amnesia and depersonalisation factor scores. If these two subscales are elevated, dissociative pathology may be indicated. Absorption factor scores, on the other hand, were proposed to be more indicative of more benign dissociative behaviour. Indeed, normal dissociation is often measured by the absorption scale of the DES (Butler, 2006; Giesbrecht et al., 2004; Leavitt, 2001).

In contrast, some factor analytic studies suggest there is only one factor in the DES (Fischer & Elnitsky, 1990; Zingrone & Alvarado, 2001) and in other scales measuring dissociation: the Perceptual Alteration Scale (PAS) (Fischer & Elnitsky, 1990); and the Dissociation Questionnaire (DIS-Q) (I. H. Bernstein, Ellason, Ross, & Vanderlinden, 2001). Bernstein et al. suggest that findings of multidimensionality may arise because some items are more commonly endorsed by the normal population than are the items that relate to more unusual symptoms of dissociation. However, Carlson and Putnam (1993) conceptualized the DES as a trait measure that will only reliably measure the general dissociation factor as a continuous measure. In addition, Carlson (1994) suggests that the DES probably measures different things in different populations; that is, in non-clinical populations it may measure more the absorption and imaginative involvement aspects of dissociation, and in clinical populations it may measure a wider range of dissociative experiences, including severe amnesia.

Since 1986, other measures have been developed to measure dissociation and/or assess the presence of dissociative disorders. There is a psychometrically validated Turkish version of the DES (Akyüz et al., 1999; Yargić, Tutkun, & Sar, 1995), a Chinese version of both the DES and DDIS (Xiao et al., 2006), and a Spanish DES for South America (Martínez-Taboas, 1995, 2005). Goldberg (1999) developed a shorter version of the DES, the Curious Experiences Survey (CES), and the Dissociation Questionnaire (DIS-Q) has been developed for a European population, (Vanderlinden et al., 1993). Dell (2006a) has developed a larger (218-item) inventory, the Multidimensional Inventory of Dissociation (MID), which is a self-administered, multi-scale instrument that measures 14 major facets of pathological dissociation. It was
designed for clinical research and for the diagnostic assessment of individuals who present with a mixture of dissociative, posttraumatic, and borderline symptoms.

Measures have also been developed for use with younger populations. The Child Dissociative Checklist (CDC) (Putnam, Helmers, & Trickett, 1993) was developed from a set of predictor lists for childhood dissociative disorders (see Fagan & McMahon, 1984; Kluft, 1984a, 1985a) for use with children up to the age of 12 years. The CDC is a 20-item parent/adult observer report measure rather than a structured interview (a format that was found to be problematic). The Adolescent Dissociation Experiences Scale (A-DES) (Armstrong, Putnam, Carlson, Libero, & Smith, 1997) is a 30-item self-report instrument with an 11-point response format developed for use with teenagers that taps facets of dissociation: amnesia, depersonalisation, derealisation, passive influence, identity alteration, and absorption.

### 1.12.2 Measurement Issues Relating to the DES

Carlson and Putnam (1993) cautioned against using their factor analytic findings for making subscales for measuring components of dissociation. A further study (Waller, in press, cited in Carlson & Putnam, 1993) indicated that the results may have been a spurious consequence of distributions of the DES data. When Waller re-analysed the data from the Carlson et al. (1991) study and controlled for skewness, only one general factor for dissociation was found. Carlson and Putnam suggest that three factor solutions reflect not the latent structure of the DES, but more the frequency with which the participants endorse the items, i.e., the absorption factor has the highest endorsement frequency, and so on.

In addition, Carlson and Putnam (1993) suggest that when using the DES in research it is not enough to report only mean DES scores. It is also necessary to plot score distributions to determine how many subjects show different levels of dissociation, or alternatively, calculate the percentage of participants who score 30 and above on the DES. The score of 30 is a consensually defined breakpoint for dividing a sample into high and low dissociators (Carlson & Putnam).
1.12.3 Structured Clinical Interviews

According to Ross (1997), the gold standard for diagnosing trauma-related disorders is the structured clinical interview. Two diagnostic instruments have been developed alongside the DES to enable more precise diagnosis of the dissociative disorders and other related disorders.

1.12.3.1. The Dissociative Disorders Interview Schedule (DDIS).

The Dissociative Disorders Interview Schedule (DDIS) was first developed as a structured interview for the diagnosis of the dissociative disorders according to the DSM-III criteria (Ross et al., 1989a), and then updated for the DSM-IV (Ross, 1996) (see Appendix B3). The DDIS is a clinician administered, sixteen-section, 131-item interview that is used in the trauma field to diagnose somatisation disorder, borderline personality disorder (BPD), and major depressive disorder, as well as the five DSM-IV dissociative disorders (see section 1.7.1). It also includes questions relating to previous psychiatric history, childhood physical and sexual abuse, dissociative symptoms, and Schneiderian First Rank symptoms (SFRS) (experiences in which entities or forces not acknowledged as part of the self are felt to act on the individual, such as believing that one's thoughts, feelings, or actions are controlled by others, hearing voices (Ross et al., 1989a). The DDIS has also been translated and adapted for other cultures, such as Turkish, Chinese, Dutch, French, Italian, Hebrew, Spanish, Japanese, and Polish (Ross, 1997).

1.12.3.2. The Structured Clinical Interview for DSM-IV Dissociative Disorders (SCID-D).

The Structured Clinical Interview for DSM Dissociative Disorders was originally developed to incorporate DSM-III criteria, and was updated in 1993 to include DSM-IV criteria for the dissociative disorders (Steinberg, 1993). It is a clinician-administered, semi-structured interview that assesses the severity and phenomenology of the five dissociative symptoms of amnesia, depersonalization, derealisation, identity confusion, and identity alteration. In addition, the SCID-D assesses for the five dissociative disorders of the DSM-IV (Steinberg, Cicchetti, Buchanan, & Hall, 1993). In contrast to the DDIS, the format of the interview allows for the patient to give informative
descriptions of dissociative experiences rather than asking only for yes/no responses. The clinicians can gain information about abuse histories often spontaneously given without the use of leading or intrusive questions. Perhaps one drawback, compared to the DDIS, is that the SCID-D takes two to three hours to administer. However the information obtained is highly effective in assisting diagnosis of dissociative disorders (Steinberg et al., 1993).

1.13 The Categorical Versus Continuous Debate

As mentioned above, dissociation as measured by the DES is assumed to be a continuous construct, while dominant classification systems (e.g., DSM-IV) assume mental disorders to be categorical or taxonic constructs. It remains an open question which, if any, mental disorders are best understood from a categorical perspective (Haslam, 2003). Others argue that the current diagnostic system is perhaps incomplete because of the assumption that mental disorders are taxonic rather than dimensional (Schmidt, Kotov, & Joiner Jr., 2004).

Taxometric analysis is a statistical method that can address the question of taxonicity of a phenomenon. A taxon is defined as a phenomenon that exists naturally whether or not it is able to be accurately identified (Schmidt et al., 2004), or “a subgroup identified by scores that are discontinuous with a dimensional distribution; a taxon points to a typology among participants, in contrast to those who are simply at the end of a continuous dimension” (Waelde et al., 2005, p.360). Haslam (2003) also defines a taxon as "a nonarbitrary latent ('genotypic') category whose members differ qualitatively from non-members" (p.697). Meehl (1992) declined to give a precise definition of the term “taxon,” instead giving commonplace intuitive examples to illustrate what the term denotes. He states it is like a “‘type,’ a ‘species,’ a ‘disease entity,’ a ‘nonarbitrary category,’ a ‘natural kind’” (p.121), with difference of kind rather than degree, although he argues that there can be both “kind as well as degree” because the indicators of a true taxon are usually quantitative and not qualitative.

The issue of “kind as well as degree” (Meehl, 1992) is borne out in the literature. Using taxometric analyses, depression has been found to be dimensional (A. M. Ruscio & Ruscio, 2002a; J. Ruscio & Ruscio, 2000; J. Ruscio, Ruscio, & Keane, 2004); and
both dimensional and categorical, depending on items chosen (Beach & Amir, 2003) and for different subtypes of depression (Haslam & Kim, 2002). Borderline personality disorder has been found to be dimensional (Rothschild, Cleland, Haslam, & Zimmerman, 2003), as has posttraumatic stress disorder (PTSD) (A. M. Ruscio, Ruscio, & Keane, 2002), and worry (A. M. Ruscio, Borkovec, & Ruscio, 2001). Some subtypes of Obsessive Compulsive Disorder (OCD) have been found to be dimensional and others categorical (Haslam, Williams, Kyrios, McKay, & Taylor, 2005). On the other hand, Schizotypy and Antisocial Personality Disorder have been found to be taxonic (Haslam & Kim, 2002). Hence it is possible that dissociation could be both dimensional and taxonic, with conclusions dependent on the items chosen to measure the construct.

1.13.1 Pathological Dissociation: The Dissociative Taxon

Ross et al. (1995) raise a salient issue regarding the dissociative continuum after conducting two similar studies, one with a sample of DID patients, and with a sample from the general population (Ross et al., 1991b). They caution against inferring from the two studies that DID patients only differ from normal individuals quantitatively and not qualitatively. To test this assumption requires a different approach, such as using taxometric analyses. Studies using taxometric analyses found a qualitative difference between two dissociative categories, that is, there is a pathological dissociative taxon that stands alone from normal dissociation (N. G. Waller et al., 1996; N. G. Waller & Ross, 1997).

Some (e.g., Dell, 2001; Ross, 1997) argue that the DSM-IV criteria for diagnosing the dissociative disorders are unsatisfactory because of the assumption of categorical separation from normality. Dell contends that the DSM-IV criteria for DID, in particular, are not based on taxometric analysis of the symptoms of DID. Therefore, the diagnostic criteria for the Dissociative Disorders is one area where the use of taxometric analyses may prove beneficial in identifying more accurate operational criteria to enable clinicians to more confidently and accurately diagnosis these disorders.

While Ross (2004) supports both the dimensional and categorical views of dissociation, N. G. Waller et al. (1996) argue that dissociation was originally viewed as a discontinuity (Janet, 1889, cited in N. G. Waller et al., 1996), and that Janet’s
typological model better accounted for empirical associations between pathological
dissociation symptoms. N. G. Waller et al., therefore, suggest that for one type of
dissociation, the dimensional/trait model does not fit, and that pathological dissociation
behaves more like a taxon or discrete latent variable. They conducted a number of
taxometric analyses to examine this hypothesis and found that responses to eight items
of the DES can be used to identify a pathological dissociative taxon. Since then, two
more studies have been published using taxometric analyses to determine if dissociation
can be separated into pathological (such as amnesia) and non-pathological (such as
absorption and daydreaming) components (Waelde et al., 2005; N. G. Waller & Ross,
1997). All three studies found that there is evidence of the existence of a dissociative
taxon.

N. G. Waller et al. (1996) called their brief eight item questionnaire the DES-T to
distinguish it from the DES. The eight items of the DES-T are: (#3) Some people have
the experience of finding themselves in a place and having no idea how they got there;
(#5) Some people have the experience of finding new things in their belongings that they
do not remember buying; (#7) Some people sometimes have the experience of feeling as
though they are standing next to themselves or watching themselves do something and
they actually see themselves as if they were looking at another person; (#8) Some people
are told that they sometimes do not recognise friends or family members; (#12) Some
people sometimes have the experience of feeling that other people, objects, and the
world around them are not real; (#13) Some people sometimes have the experience of
feeling that their body does not seem to belong to them; (#22) Some people find that in
one situation they may act so differently compared with another situation that they feel
almost as if they were two different people; and (#27) Some people sometimes find they
hear voices inside their head that tell them to do things or comment on things that they
are doing.

N. G. Waller et al. (1996) assert that the eight items of the DES-T powerfully
measure the dissociative taxon, and Ross et al. (2002) report that a cut-off score of 20 on
the DES-T will reliably predict taxon membership. Chu and Bowman (2000) also
suggest that finding the taxon has allowed the dissociative field to “abandon inadequate
theories” (p.11) such as the dissociative continuum of severity, in light of this newer
evidence found by N. G. Waller et al. This conclusion has important implications for the field, and the first aim of the current project was to provide a further test of the continuum versus categorical issue (see Chapter 6).

1.13.2 Limitations of the DES-T as a Measure of the Dissociative Taxon

Sampling methods may enhance the effect the finding of a taxon in a particular sample. One criticism of the DES-T is the sampling method first used to find the eight items of the DES-T (N. G. Waller et al., 1996). It entailed recruiting two groups of participants, one from a population where all had been diagnosed with DID \((n = 228)\), and the other from a normal population \((n = 228)\). N. G. Waller et al.’s rationale for using a 50/50 split was that this sampling balance maximises power to find an existing taxon. According to Schmidt et al. (2004), the clearest taxometric findings are made this way, but they also argue that a 50/50 mixed sample can also “produce spurious evidence of taxonicity” (p.39) because it creates an artificial discontinuity. They do not recommend using this mixed sample approach. Instead, Schmidt et al. suggest a rule of thumb is to have at least 30 taxon members in a sample size of 300, although larger sample sizes are required if there are fewer members of the proposed taxon in the sample.

A second study by N. G. Waller and Ross (1997) used a more random sampling method which also gave evidence for the taxonic model of pathological dissociation. The sample in the 1997 study \((N = 1055, 609\) females, and 435 males) was randomly chosen from the general population of Winnipeg, Canada. The sample for the third study by Waelde et al. (2005) consisted of 316 male Vietnam veterans, and no females.

A growing number of studies using the DES-T as a measure to identify pathological dissociation have raised cautions about the use of the 8-item scale to screen for pathological dissociation (Giesbrecht, Merckelbach, & Geraerts, 2007a; Goodman et al., 2003; Leavitt, 1999; Merritt & You, 2008; Modestin & Erni, 2004; D. Watson, 2003). Leavitt challenged the use of the DES-T as a valid measure of pathological dissociation, suggesting that the sample used by Waller et al. was not representative of all dissociative disorders, only DID. Watson \((N = 465\) university undergraduates) examined the 2-month retest stability of the N. G. Waller et al. (1996) DES-T and found
it less stable than continuous indicators of dissociation. Modestin and Erni used a mixed sample of students and psychiatric patients ($N = 276$ students plus 207 inpatients, a total of 483 participants) and were unable to find a statistically significant relationship between a dissociative disorder diagnosis and taxon membership. In addition, they found that patients diagnosed with a dissociative disorder were not classified as members of the taxon. They concluded that the DES-T is not a valid indicator of pathological dissociation.

Other researchers (Goodman et al., 2003), have also raised concerns about different methods of assigning individuals to the dissociative taxon. Goodman et al. assigned participants ($N = 95$ personality disorder patients, 62 males, 32 females) to the pathological dissociative taxon by calculating Bayesian posterior taxon membership probabilities$^2$ as advocated by Waller and Ross (1997). They compared this method of determining membership of the taxon to a method using an approximation based on the unweighted mean of the DES-T items and found that they obtained overlapping but not identical groups of patients. Goodman et al. concluded that the two methods are not interchangeable and suggest caution in using the DES-T as a measure of pathological dissociation when defined by Bayesian posterior probabilities, and suggest the need for further research to examine the characteristics of members of the pathological dissociative taxon. These findings, however, may have been an idiosyncrasy of their sample, of which 37 had a diagnosis of BPD.

Giesbrecht et al. (2007a) used a larger sample ($N = 930$) than Goodman et al. (2003) which included a mix of students, inpatients with mood disorders, schizophrenia, and BPD, healthy women, and women who reported remembering childhood sexual abuse (CSA). Participants were assigned to the dissociative taxon using the Bayesian taxon membership probabilities as proposed by N. G. Waller and Ross (1997). They found that the 8-item DES-T taps substantially the same conceptual domain as both the

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$^2$ Bayes’ theorem is a formula that can be used to integrate base-rate expectations with one or more pieces of pertinent evidence…to yield an estimate of the probability that an individual belongs to the taxon. When this probability is greater than .50, it is more likely that the individual belongs to the taxon than its complement class, hence this cutting score should maximise the accuracy with which individuals are assigned to these two classes. (J. Ruscio, Haslam, & Ruscio, 2006, p.25)
full 28-item DES and the DES absorption items. Giesbrecht et al. also suggest that the DES-T indices are not useful in discriminating clinical from non-clinical groups because substantial minorities of all groups except the healthy adult control women were classified as taxon members. They also found that CSA was more associated with the non-pathological DES absorption items than the DES-T.

In light of these findings there is the need to re-examine the DES-T (N. G. Waller et al., 1996; N. G. Waller & Ross, 1997) to test whether the DES-T does identify a taxon and to also re-examine the SAS Bayesian probability scoring method in an Australian sample.

### 1.13.3 Pathological Dissociation: Amnesic Items

The question remains as to what indicators might best measure a pathological dissociative taxon. The 8-item DES-T contains items pertaining to amnesia, derealisation and depersonalisation. Another view contends that amnesia is the characteristic feature of the vast majority of clinically diagnosed DID\(^3\) cases (Cardeña, Lewis-Fernández, Bear, Pakianathan, & Spiegel, 1996). It is also suggested that the criteria of depersonalisation and derealisation may decrease sensitivity without gains in specificity in any pathological dissociation diagnostic procedure or tool (Cardeña, 2001; Gleaves, May, & Cardeña, 2001). Cardeña (2001) states that “This does not necessarily mean that dissociated identity and amnesia are the only common symptoms among individuals with DID, but the question really is what set of symptoms can provide optimal sensitivity and specificity while being parsimonious” (p.41). Amnesia seems to be the indicator that best fits these criteria for a taxon.

Hunter et al. (2004) provide further evidence for the idea that depersonalisation and derealisation should be omitted from a measure of pathological dissociation. They suggest that depersonalisation and derealisation are part of normal dissociation existing on a continuum from experiences that last only a few moments in healthy individuals to a severely debilitating disorder with symptoms that persist chronically. Hunter et al. also

\(^3\) Like many researchers such as Cardeña et al. (1996), the current project assumed that DID is the archetypal form of clinically significant pathological dissociation. However, the question remains as to whether this can be assumed.
state that depersonalisation/derealisation symptoms also occur in other disorders such as anxiety, panic, depression and schizophrenia, or can occur as a primary disorder in the absence of other co-morbid conditions. They can also occur in PTSD (Waller et al., 1996), and are not exclusively found in those diagnosed with a dissociative disorder. Putnam (1985) also agrees that depersonalisation is found in a wide range of psychiatric and neurologic conditions as well as in the normal population.

In addition, Holmes et al. (2005) and R. J. Brown (2006) include depersonalisation and derealisation as well as other similar phenomena, such as out-of-body experiences, within the framework of detachment rather than compartmentalisation, which is a better indicator of pathological dissociation because it is related more to amnesia, fugues, and DID (see Section 1.11). They also suggest that detachment is on a continuum, therefore not part of the pathological dissociation construct. To add further weight to the argument for using only amnesia items, J. Ruscio and Ruscio (2004a) stipulate that indicators used in a taxometric analysis should not overlap with other known disorders that have similar features. According to Putnam (1985), “depersonalization is a ubiquitous phenomenon that is found in a wide range of psychiatric and neurological conditions” and he includes depression, schizophrenia, and migraine headaches in these conditions. Therefore, it seems necessary to investigate the possibility that a dissociative taxon can be identified using amnestic indicators only, specifically, nine items relating to amnesia in the DES.

### 1.14 Summary of Chapter 1

Chapter 1 has given an overview of the current project incorporating the overarching aims of the project: (a) to replicate prior research findings that found a dissociative taxon; (b) to examine possible predictors of dissociation; and (c) to explore the phenomenology of dissociation. The aims were followed by the background history of dissociation and the dissociative disorders to give a context for the reader, before defining dissociation, both normal and pathological. In this chapter the measurement and diagnosis of dissociative disorders was discussed, in conjunction with the observed clinical features of DID within clinical populations, and prevalence of dissociative disorders. The chapter climaxed with a discussion about the existence of a putative
dissociative taxon and concluded that evidence of its composition or even of its existence is by no means settled and warrants further research.

The following two chapters examine the putative aetiology of the dissociative disorders. Childhood trauma and its effects on individuals are presented in Chapter 2, and personality variables, fantasy proneness, and resilience are presented in Chapter 3.
CHAPTER 2: AETIOLOGY OF DISSOCIATIVE DISORDERS, PART 1:
CHILDHOOD ABUSE

2.1 Overview

The aetiology of the dissociative disorders is far from settled. While a growing number of studies conclude that severe and prolonged childhood trauma is involved in the development of dissociative disorders, many hold the opposite view that childhood trauma is irrelevant to aetiology. This stark debate is discussed in Chapter 2, along with different aetiological theories and models of dissociation. Within the dissociative disorders field, the dominant aetiological theory is a traumagenic one, but there is also the midway view that trauma is not the sole factor predicting dissociative disorders. Therefore, other proposed predictors of pathological dissociation (e.g., fantasy proneness, personality variables, and resilience) will be examined in Chapter 3.

2.2 Early Theories about the Aetiology of Hysteria

According to Ellenberger (1970), the study of the aetiology of the dissociative disorders has taken a discontinuous journey from the late 1800’s when Freud proposed his seduction theory (Freud, 1896/1985). One of the earliest aetiological theories was that hysteria derived from frustrated sexual desires. Later, Briquet denied the sexual theory of hysteria. This view supported Charcot, who believed that heredity alone was the true cause of hysteria (Freud). However, Charcot still recognised that a sexual element played an important role in the life of his hysterical patients (Ellenberger).

Other prominent writers about hysteria were Binet and Janet. According to Ellenberger (1970), Binet conceded that two separate states of mind could exist in hysterical patients but could not reconcile the problem of why this division takes place. Alternatively, Janet (1905/1965) stated that “the starting point of hysteria is the same as that of most great neuroses …a depression, an exhaustion of the higher functions of the encephalon” (p.333), in other words, a ‘psychological weakness’. According to Ellenberger, Janet does not state why this might occur other than to postulate that individuals with hysteria seem to exhibit an emotional disturbance much like fatigue, which then leads to consciousness giving up complex processes and becoming localised
to a particular function. Janet is better remembered for his descriptions of hysteria and neuroses and their treatments than he is for theories about their origin.

Conversely, Breuer and Freud (1895/1974) originally agreed that the symptoms of dissociation were linked to childhood sexual abuse (CSA) (Freud’s ‘seduction theory’) (Freud, 1896/1985). Breuer and Freud’s published work consisted of case studies of female patients with hysteria, and most of these women had reportedly been sexually abused. However, in a turn-around in 1905, Freud publicly rejected his seduction theory (Masson, 1984). From that time, individuals with trauma-based dissociative disorders were then thought to be suffering unresolved incestuous fantasies (Ross, 1997).

In a review, Lovinger (1983) was unable to discover any consistent published theoretical explanation for the aetiology of MPD. Possible processes included: unsatisfactory identification model of same sex parent; a dissociation of ego states with rigid boundaries between states; severe self-loathing and self-alienation; a severe psychosis; and the theory that the multiple personality phenomenon is basic to the human condition and is merely a more intense aspect. Lovinger suggests that the lack of consensus about the aetiology was due to the fact that therapists focussed more on the florid and interesting symptoms than on obtaining a more detailed case history from their patients.

Stern (1984) also reviewed available literature at that time and categorised explanations of the aetiology of MPD into four groups: supernatural (ruled out by most professionals); physiologic (few explanations); psychologic (many explanations, including faking, iatrogenic, hypnosis, ego weakness, ego splitting, and response to trauma); and sociologic explanations. Since Lovinger (1983) and Stern wrote these papers, other writers now point to childhood trauma as being influential in the development of pathological dissociation. Traumagenic models are presented in the following sections and then social cognitive models.
2.3 Current Theories about the Aetiology of Pathological Dissociation: Traumagenic

According to many in the dissociative disorders field, the primary cause of dissociative disorders is severe and prolonged childhood abuse, and the disorder in fact commences in childhood (e.g., Chu, 1998a; Chu, 1998b; Chu, Frey, Ganzel, & Matthews, 1999; Putnam et al., 1986). The traumagenic model is of course not specific to the dissociative disorders. Chu (1998a) states that early abuse may be associated with a range of psychopathology, such as depression, anxiety disorders, substance abuse, poor self-esteem, poor social functioning, eating disorders, and somatisation. Other writers have reported similar findings (Alpert, 1990; Browne & Finkelhor, 1986; Herman, 1997; McCauley et al., 1997; McLewin & Muller, 2006; Muller, Lemieux, & Sicoli, 2001; Robin, Chester, Rasmussen, Jaranson, & Goldman, 1997; Thompson et al., 2003).

Earlier research on associations between childhood abuse and dissociative disorder was based on clinical observation. Coons (1980) observed that those with multiple personalities experience childhood trauma, neglect or parent absence, and the trauma is most often sexual abuse. Coons maintains it is common to have a pattern of an active abusive parent coupled with a passive onlooking parent, and dissociation usually starts after the onset of trauma as a defence against emotional pain. Bliss (1980) also suggests that dissociation is a way of coping with childhood trauma of some sort, and Boor (1982) concluded that “psychic and physical abuse, sexual trauma, and restrictive environments during childhood and consequent conflicts, especially regarding anger and sex, are likely to have etiological significance for this disorder” (p.302). Sexual abuse, particularly incest, seemed to be involved in the majority of reported cases of MPD (Boor, 1982; Greaves, 1980; Stern, 1984; Wilbur, 1984).

Subsequently, these clinical findings have also been empirically tested (e.g., Coons et al., 1988; Putnam et al., 1986). Putnam et al. (1986) collected data from 92 clinicians to test a number of hypotheses and observations about MPD and its aetiology. They found that of the 100 cases of those diagnosed with MPD, only three did not report a history of significant childhood trauma. Sexual abuse, generally occurring in the form of incest, was the most frequently mentioned form of trauma, being reported by 83% of the sample. Repeated physical abuse was reported by 75% of the sample, and 68%
reported both sexual abuse and physical abuse. Another form of childhood abuse was the witnessing of a violent death, usually of a parent or sibling. This was reported by 45% of the sample. Putnam et al. also found that the number of alter personalities in those diagnosed with MPD was positively related to the degree of trauma experienced.

However, Coons et al. (1988) argue that Putnam et al.’s (1986) study had a number of limitations. One of the limitations was the reliance on self-report questionnaires without integrating their findings with other findings from psychological testing, physical examinations, or electroencephalography. Therefore, Coons et al. extended the method used by Putnam et al. and collected historical data, neurological examinations, EEGs, psychological testing, and clinical psychiatric rating scales from 50 MPD patients.

The trauma histories collected by Coons et al. (1988) included third-person reports as well as self-reports. Similar to Putnam et al.’s findings, the types of trauma reported by patients were: sexual abuse (68%); physical abuse (60%); neglect (22%); abandonment (20%); emotional abuse (10%); and witnessing accidental death (4%). In most instances a non-abusing family member of the patient corroborated the abuse during childhood, but was not usually aware of the extent of it, especially if it was sexual abuse. Only 4% of patients reported no history of physical or sexual abuse in childhood. However, there was a history of abuse in adolescence or early adulthood in those cases.

In addition, Coons et al. (1988) stated that the physical abuse suffered by the patients was not confined to beating but included such things as burning with cigarettes or hot water, and cutting. The abusers were varied and included fathers (48%), mothers (32%), stepfathers (18%), and brothers (16%), as well as extended family such as grandparents, aunts, uncles, and cousins, and others (parent’s lovers, neighbours, teachers, and classmates). In addition, some patients were exposed to major trauma in adulthood, such as rape (24%) and wife beating (10%).

Results of other studies are also consistent with the traumagenic model of dissociation (e.g., Braun, 1986b, 1989; Bremner & Marmar, 1998; Chu, 1998b; Coons et al., 1988; Gleaves, 1996; Putnam, 1995; Putnam et al., 1986; Ross, 2004; Ross et al., 1990c). Coons (1996) reported that of 25 children and adolescents referred for
evaluation to a dissociative disorders clinic, 24 were diagnosed with MPD or DDNOS, with 79% reporting CSA, and 71% reporting childhood physical abuse. Ross et al. (1990c) found that 95.1% of their cases of MPD reported physical and/or sexual abuse in childhood.

It is noteworthy that some studies have found that childhood trauma and dissociation are not related (e.g., Elzinga, Bermond, & van Dyck, 2002; R. C. Johnson, Edman, & Danko, 1995; Mulder, Beauthrais, Joyce, & Fergusson, 1998; Romans, Martin, Morris, & Herbison, 1999), however, the weight of evidence supports the link between childhood physical, sexual, and psychological abuse and neglect, and high dissociation scores (e.g., Akyüz, Sar, Kugu, & Dogan, 2005; Anderson, Yasenik, & Ross, 1993; Brand et al., 2006; Chu, 1998b; Chu & Dill, 1990; Chu et al., 1999; Irwin, 1994; Irwin, 1996, 1998, 1999, 2001; Keaney & Farley, 1996; Kirby, Chu, & Dill, 1993; Plattner et al., 2003; Sandberg & Lynn, 1992; Sanders & Giolas, 1991; Sanders et al., 1989).

Following are a number of theories and models that elaborate on the link between childhood abuse and pathological dissociation.

2.3.1 State Dependent/State Change Theories

Braun’s (1984) state-dependent learning theory proposes that multiple personalities might be created by repeated dissociation that occurs under extreme stress, such as childhood trauma. These dissociations then often have similar affect states that are neuropsychophysiological (NPP) based and that link together to develop an individual history, range of emotions, and set of response patterns. Braun states that something that is learned under one NPP affective state is then best retrieved under the same NPP state.

According to Braun (1984), personalities are usually formed, shaped and expressed through an individual’s continuous interaction with the environment, and behaviours are expressed and shaped by the responses given to the behaviour. If this reinforcement of behaviour occurs in disparate family environments, multiple personalities are created via repeated dissociation that occurs under extreme stress (e.g., child abuse) during which there is a similar affective state at each time. If an individual experiences enough adverse environmental interactions, the information learned in the
abused NPP state will be associated with the state in which it is encoded, and unavailable to the usual NPP state. This linking of knowledge, memory, and interactive patterns then forms an alter personality. Subsequently, the switching processes between alters appears to occur because of higher order classical conditioning and stimulus generalisation. In other words, certain internal or external triggers may facilitate a switch between NPP states.

Putnam’s (1988) views are consistent with Braun’s (1984). Putnam conceptualises dissociation as belonging to this category of disorders alongside bipolar disorder. He argues that states are the basic unit of the normal organisation of consciousness, and that there are a number of general properties of states: (a) states are discrete and discontinuous; (b) they are self-organizing and self-stabilizing structures of behavior, with each state or structure reorganising behaviour and resisting changes to other states; (c) switches between states are made obvious by non-linear changes in a number of variables, such as, affect, access to memory, attention and cognition, regulatory physiology, and sense of self. These changes in state are usually hard to detect in adults, except perhaps for changes in affect and mood, especially mood.

However, drawing on earlier work with infant states, Putnam (1988) argues that different states and switching between states is normal in babies and small children. For example, sleep and wakefulness are normal state changes and have been studied in infants with abnormalities (e.g., Prechtl, Theorell, & Blair, 1973). These transitions across states of consciousness eventually smooth out as the child develops and matures (Nijenhuis, 2004). Eventually the child achieves homeostasis as it learns to modulate state as well as recovering from disruptions of state. Nijenhuis also suggests trauma may interfere with the maturation of these processes, and those who are dissociative patients usually report the types of trauma that may contribute to this type of interference, that is, chronic sexual, physical and psychological abuse.

Putnam (1988) also maintains that trauma early in life interrupts the normal developmental process of smoothing out transitions between states. In addition, Putnam agrees with Braun (1984), and Braun and Sachs (1985), that the traumatised child enters into dissociative states of consciousness that seem to increase the state-dependentness of affect, memory retrieval and behaviour. This then protects them from a flood of painful
affects and memories when they are not being traumatised and enables them to function in other areas of life. It is the repeated entry into these dissociative states that builds up alter personalities each with their own sense of self with their own affects, behaviours and developmental ages.

Putnam (1988) also suggests that there are state-dependent changes in sense of self commonly observed in clinical alterations of state. He uses as an example the transformation of sense of self from worthless to grandiose in the switch from depressive to manic states in bipolar disorder. Putnam argues that there are other psychiatric disorders that can be viewed as “state-change” disorders, for example, a universally experienced state is depression, which can be cycled out of spontaneously by using deliberate manipulation designed to make the individual feel better. It is only when an individual becomes “stuck” in the depressive state that it is seen as a pathological condition. Other disorders that are characterised by a state-change are panic attacks and specific phobic disorders. Putnam suggests that multiple personality is a “disorder in which the individual’s consciousness is organized into a series of discrete dissociative states (alter personalities) centered around specific affects, body images, modes of cognition and perception, state-dependent memories, and behaviors” (p.26).

2.3.2 The 3-P Model of Multiple Personality Disorder

The 3-P Model of MPD (Braun & Sachs, 1985) expands on Braun’s (1984) theory of state dependent learning, and focuses on three factors associated with the development of multiple personality: predisposing factors; precipitating events; and perpetuating phenomena. Braun and Sachs suggest this is a useful model for studying any psychiatric disorder, not just MPD.

First, there are two predisposing factors: (a) the individual has an inborn capacity to dissociate, an excellent working memory capacity, above average intelligence, and creativity; and (b) family dynamics lead to repeated exposure to some form of inconsistent and unpredictable traumatic abuse (Braun & Sachs, 1985). In the 3-P Model, both of these predisposing factors are necessary for the development of MPD (Braun, 1986a). This view is similar to the social learning models (see section 2.4.2) and accords with the psychoanalytic view (see section 2.4.1).
Second, the precipitating event is an overwhelming traumatic occurrence during which the individual responds by dissociating. While a once-off episode will not necessarily produce MPD, a dissociative episode is needed in order for a dissociative disorder to develop. Repeated episodes that are linked by a common affective theme and/or neurophysiological state are more likely to develop into MPD (Braun, 1986a).

Third, the perpetuating phenomena associated with the development of MPD are the reinforcing interactive behaviours with the abuser (often a parent) and enabler (often a non-intervening parent) and include separate memories that are then linked together by a common affective theme. It is the continuous exposure to inconsistently alternating abusive and pleasant memories plus the capacity to dissociate from the perpetuating phenomena that underlie the development of alters. The abusive memories are then filed separately and they start to take on a life history of their own. Braun (1986a) states that “for each fragment of affectively linked memories, a specific adaptive response to similar traumatic experiences develops. This chaining together of memories and development of associated response patterns is perpetuated by continuous unpredictable environmental trauma” (p.7). This then leads to the splitting of the individual’s personality because of different adaptive patterns to the trauma become functionally separated by an amnestic barrier (Braun, 1986a).

2.3.3 BASK Model of Dissociation

In a continuing development of his theories, Braun (1988a, 1988b) added the BASK model of dissociation to the NPP theory (Braun, 1984) and the 3-P model of MPD (Braun, 1986a). The BASK model contends that dissociation occurs on combinations of four continua, Behaviour, Affect, Sensation, and Knowledge. Braun argues that any of the dissociative disorders can be viewed according to the BASK model. He states that dissociation can occur at any level, that is, any BASK component may be separated from any of the others at a given point in time and then be congruent at other points in time. For example, in Depersonalisation and Derealisation, it is the sensation (S) aspect of BASK that is affected: the sensation of self for the former, and of the world for the latter. Psychogenic amnesia is characterized by a break in the time continuum of all four processes (BASK) over a period of time. Braun (1988b) states the
BASK model can be used to help patients reshape the dissociative experience and make it congruent with regard to Behaviour, Affect, Sensation, and Knowledge.

### 2.3.4 Kluft’s Four-Factor Theory of DID

Kluft’s (1984b) four-factor theory contains similar ideas to Spiegel’s (1986) social modelling theory (See section 2.4.2), the state-dependent theories (Braun, 1984; Putnam, 1988) and the 3-P model of MPD (Braun & Sachs, 1985). He maintains that MPD is the final pathway of a wide variety of influences, and he lists four factors that are usually associated with the formation of MPD. These four factors are: (a) the individual has the potential to dissociate. This capacity then becomes a drastic defence for (b); (b) there are life experiences that traumatically overwhelm the adaptive capacities of the child’s ego; (c) certain shaping influences and substrates determine the form taken by the dissociative defences, that is, personality formation; and (d) inadequate provision of stimulus barriers and restorative experiences by significant others, that is, insufficient soothing. Kluft developed this four factor theory, with a detailed breakdown to follow in each factor, in order to assist clinicians in their treatment of individuals with MPD.

While Kluft, Putnam, and Braun have developed these clinical formulations of the traumatic aetiology of MPD, these diathesis-stress models and theories also suggest that trauma alone is not enough to cause the formation of dissociative disorders. The diathesis appears to be individual vulnerability.

### 2.3.5 Loss of Background: A Perceptual Theory of Dissociation

Beere (1993) maintains that there is no overarching theory for the traumatic development of dissociative disorders, and argues that most theories pertain to the genesis of the most severe form, DID, as do the above theories. Beere proposes a theory that explains the mechanisms of how the initial dissociative reaction arises during a traumatic experience, and he suggests that once trauma-bound reactions are understood, the way they continue as dissociative symptoms can be established.

Beere (1993) has based his theory on work by Merleau-Ponty (1962/2002) pertaining to the phenomenology of perception, which suggests that sensation is based
on the object perceived. Merleau-Ponty argues that: (a) there is an “I” who perceives; (b) a “mind” in which the “I” is situated; (c) a “body” in which the mind is situated; (d) the “world” in which the body is situated; and (e) “time” in which all perception occurs. The world is not an objective reality, but is a subjective reality filled with meaning according to how it is perceived. Beere also bases his theory on work by Fine (1988) who proposes that, for those with dissociative disorders, “a dysfunctional perceptual organization underlies their often disjointed cognitions and affects and is, therefore, at the origin of their distorted perceptions of reality” (p.5).

A number of assumptions underpin Beere’s (1993) theory: (a) all dissociative disorders stem from trauma or extreme psychosocial stress; (b) dissociative symptoms are dissociative reactions that persist after trauma; and (c) dissociative symptomatic perceptual experiences were originally dissociative perceptual reactions during trauma. Unlike others, such as Kluft (1984b), Beere’s theory focuses on dissociative reactions during trauma rather than outcomes or symptoms. He does not include amnesia in his perceptual theory because he argues that it is an outcome of trauma, not a perceptual experience at the time of trauma. All dissociative symptoms, except for amnesia, are perceptual experiences, and the perceptual changes cluster in the domains of identity, mind, world, body, and time.

According to Beere (1993), these perceptions of identity, mind, world, body, and time establish the kinds of dissociative perceptual reactions that need to be considered when developing a theory of dissociation during trauma. He maintains that dissociation involves a change in how background domains are perceived, and figure/ground perception is a central feature during a dissociative episode. The background is lost or loses constancy and the usual way perception is organized into figure-ground-background becomes dysfunctional. During trauma, perception focuses on the threat, blocks out background components, and triggers a dissociative experience.

Beere (1993) also maintains that specific dysfunctional ways of perceiving the background link directly to different dissociative reactions and symptoms. The “I” component of the background, if lost or changed, is instrumental in Fugue and DID, because it relates to alterations in identity. Depersonalisation Disorder relates to the “mind” component of the background (unusual mental experience) when it is lost or
changed, and the person feels as if they are unreal or in a dream. They can also feel as if they do not belong to their body. Derealisation involves alterations in another background component, perceptions of the world, and Detemporalisation results from changes in experienced time, for example, when it slows down or speeds up. Beere states, “The perceptual background, therefore, has a strong connection with dissociative reactions and dissociative symptoms. Loss of, or change in, background, however engendered, leads to a dissociative experience (reaction or symptom)” (p.169).

### 2.4 Other Current Theories about the Aetiology of Pathological Dissociation

Social cognitive theory views “personality coherence as a natural product of the interactions among psychological mechanisms and between persons and social environments” (Cervone & Shoda, 1999, p.ix). A range of social cognition theories argue that the aetiology of dissociation is not childhood trauma, or at least not solely trauma, but that there are person and environmental variables that play an important causal role. The view that trauma is not the primary factor in the development of the dissociative disorders is supportive of the views that argue for personality and fantasy proneness being salient predictors of dissociation.

#### 2.4.1 Psychoanalytic Theories

While psychoanalytic theories appear to have an implicit belief that trauma is involved in the aetiology of the dissociative disorders, it seems they prefer to examine and treat the dissociative disorders from the viewpoint of defence mechanisms and/or object relations theory. There is a belief that individual characteristics, rather than trauma, are more important in determining whether DID develops (e.g., Ganaway, 1995). Ganaway believes the theory of exogenous trauma is not sufficient on its own to explain DID and related dissociative syndromes. He argues there are more plausible psychodynamic formulations to explain DID, and that there is no proven simple relationship between early childhood abuse and adult functioning. Instead, Ganaway suggests that contributions from psychoanalytic drive theory, ego psychology, object
relations theory, and self psychology give more plausible explanations for whether an individual perceives, in retrospect, him/her self as threatened or abused as a child.

Ganaway (1995) also suggests that the transference and countertransference that takes place in a therapy session may have unwittingly contributed to increasing numbers of false diagnoses of DID since the 1970’s (see section 2.4.3). This is the possible outcome when these individuals are treated by therapists who subscribe to a socioculturally driven revival of Freud’s earliest trauma driven theory of neurosis, according to Ganaway.

A number of psychoanalytic writers place the dissociative disorders alongside the borderline personality and/or narcissistic personality disorders and view them from a psychoanalytic perspective in relation to aetiology and treatment, viewing the dissociative disorders as related to the defence mechanisms of splitting and repression (Clary, Burstin, & Carpenter, 1984; Ganaway, 1995; Grunewald, 1984; Wilbur, 1984, 1986). Clary et al. (1984) observed splitting and repression in their MPD patients. All Clary et al.’s patients reportedly had object-loss experiences, but were unable to grieve, and all showed a primitive defence repertoire, including idealisation, devaluation, denial, projective identification, and an impoverished central ego. Clary et al. conclude that multiple personality is a special type of borderline personality disorder, and that those with multiple personality use both mechanisms of splitting and repression in their defence repertoire.

2.4.2 Role Playing and Social Learning Models

Spiegel (1986) conceptualises multiple personality disorder as a post-traumatic stress disorder arising in response to repeated episodes of trauma imposed by hostile and double binding parents. The parents on the one hand are telling the child ‘I am good; you are bad’ but in the process of delivering this message they are conveying the exact opposite about themselves. They model the double bind to the child who then learns that they are supposed to be good, perfect children, but both parents and child know that on the inside the child is bad. Spiegel suggests that this impossible situation for the child then leads to the creation of DID because two conflicting personalities cannot co-exist. Therefore, the child learns by modelling what the parents do and believe.
2.4.3 The Sociocognitive Model and Scepticism about the Traumagenic Model

DID is not universally accepted as a valid diagnosis (Ross, 1997, 1999), with aetiological explanations being a key point of contention. Both CSA as a predictor of pathological dissociation, and the possibility of multiple personalities are actively opposed (e.g., Barry-Walsh, 2005; Piper & Merskey, 2004a; Spanos, 1994, 1996; Spanos, Weekes, & Bertrand, 1985).

Spanos et al. (1985) claim that cases of MPD increased markedly over the 1980’s, and that there has also been a dramatic increase in the numbers of alters reported for each MPD patient when compared to reports from the 19th century. Spanos (1996) suggests this is because of therapist expectations transmitted to patients, and “the selective reinforcement of increasingly dramatic displays that, in MPD patients, frequently translates into an increase in the number of alters and…an increase in the extent of abuse ‘remembered’ by those alters” (p.233). He also disputes estimates of the prevalence of MPD and argues that it is a culture-bound syndrome, confined mainly to North America. Spanos (1994) concludes that MPD needs to be viewed from a sociocognitive perspective, and that MPD is socially constructed. “It is context bounded, goal-directed, social behavior geared to the expectations of significant others, and its characteristics have changed over time to meet changing expectations” (p.143).

Spanos conducted a number of studies to test his theory (Spanos, 1983, 1994; Spanos & Hewitt, 1980; Spanos et al., 1985). Spanos and Hewitt took 16 highly suggestible participants and submitted eight to the same training procedures used by Hilgard (e.g., Hilgard, 1973a, 1973b, 1974, 1977/1986; Hilgard, Hilgard, Macdonald, Morgan, & Johnson, 1978) in his pain experiments, and the other eight were given the opposite instructions. Spanos and Hewitt concluded that “hidden parts” are not a dissociated state, and are creations rather than discoveries. These parts are created by the practitioner when giving instructions and are “detailed ‘recipes’ for teaching…the role…of a dissociated subject” (p.1203).

In a later study (Spanos et al., 1985), a sample of 48 university undergraduates were randomly assigned to one of three interview treatments that used varying intensity cues for manifesting multiple personality. They were instructed to role-play an accused
The group supplied with the most explicit hypnotic treatment displayed the major signs of multiple personality (adoption of a different name, and posthypnotic amnesia), whereas the other two groups did not. Spanos et al. concluded that, when given appropriate inducements, enacting the MPD role is an easy task. They also suggest that amnesia displayed by MPD patients is a strategic enactment that is not necessarily faked, and that these patients’ “displays of forgetting” are selective and content dependent.

The position of Spanos has been taken up by a number of researchers. Piper and Merskey (2004a) reviewed literature relating to DID and assert that: (a) there is no proof for the claim that DID results from childhood trauma; (b) DID cannot be reliably diagnosed; (c) reporting of DID in children is rare; (d) there is consistent evidence of blatant iatrogenesis in the practices of some proponents of DID; and (e) DID is best understood as a culture-bound, often iatrogenic, condition. Piper and Merskey (2004b) also claim that treatment methods reify alters and iatrogenically encourage patients to behave as though they have multiple selves. They also claim that the diagnostic definition of “alter personality” is unclear, elastic and unsatisfactory, and makes it impossible to reliably diagnose the disorder.

Barry-Walsh (2005) espouses a similar view and argues that DID is a controversial iatrogenic diagnosis “whose origins and rise to prominence was related to social forces and American diagnostic fashion” (p.109). He is concerned that much of the research uncritically accepts as valid the diagnosis of DID. He suggests, instead, that research should focus on determining whether there is a place for DID and why it has so much currency in some circles and not in others. In contrast, Gleaves (1996) argues that the sociocognitive model is based on false assumptions about DID, because most research on the dissociative disorders disconfirms Spanos’ model. He states there is no reason to doubt the connection between DID and childhood trauma. The debate is a heated and continuing one.

Others also continue to actively oppose the view that DID exists. As mentioned in Chapter 1, in March 1992, the False Memory Syndrome Foundation (FMSF) (Freyd, 1998-2008) was formed by an alliance of parents of trauma patients accused of abusing their children, along with psychologists and psychiatrists who disagreed with the
dissociative identity disorder literature, teachings and treatment methods. This group accused many clinicians of using suggestive and unproven techniques that induced false memories of childhood abuse (Chu & Bowman, 2000). They contend that there is no scientific evidence for the pervasive traumatic amnesia that is experienced by those with DID, and accuse therapists of inducing these false memories, and accuse patients, who allege they had suffered satanic ritual abuse (SRA), of fabricating these memories (e.g., Hoult, 1998). These attacks were sometimes taken to the courtroom where therapists were sued and even prosecuted, and sometimes there were reports of homes and offices being threatened (e.g., L. S. Brown, 1998; Calof, 1998). This acrimony and polarisation between the two factions continues (Chu & Bowman, 2000).

However, since the formation of the FMSF in 1992, a number of studies have challenged the hypothesis that most abuse memories are created by therapist suggestion using hypnosis (e.g., Chu et al., 1999; Coons, 1994; Epstein & Bottoms, 2002; Kluft, 1995). For example, Chu et al. found (N = 90 female patients admitted to a trauma treatment centre) that those “…who reported recovering memories of abuse generally recalled these experiences while at home, alone, or with family or friends” (p.749), and of those who were involved in therapy at the time of memory recovery, very few were in a session during the recovery. Braun (1989) also argues that iatrogenesis of alter personalities is very unlikely because the possibility of a full personality with affect, sensation, and knowledge being created by hypnosis is virtually nil. Braun contends that the memory of a full personality requires at least the ASK portion of BASK, and, therefore, they have true life histories (Affect, Sensation, and Knowledge are the ASK of Braun’s 1988 BASK model, see above).

A later study examined memories of abuse that are allegedly forgotten or repressed then recovered in a large sample of college women (N=1411) (Epstein & Bottoms, 2002). They found that temporary forgetting of traumatic events is not unusual, especially but not exclusively, for sexual abuse. Most of the victims of trauma indicated their forgetting was as a result of common, active cognitive mechanisms, such as directed forgetting or relabelling. It is unlikely that all the participants recovered their memories as a result of therapist suggestion as argued by the FMSF.
However, Spanos et al. (1985) argue instead for a social psychological conceptualisation of MPD, suggesting that people learn to enact the role of the MPD patient; specifically, patients “use available information to create a social impression that is congruent with their perception of situational demands and with the interpersonal goals they are attempting to achieve” (Spanos et al., p.363). This social psychological perspective also argues that therapists, often unwittingly, play an important part in the generation and maintenance of this role enactment.

Proponents also assert that the media is a supply of information about MPD, for example, the movies “The three faces of Eve”, and “Sybil” and biographies such as “Sybil”, and “The five of me” provided detailed descriptions of the symptoms of MPD. Spanos et al. (1985) argue that these media releases were the basis of numerous people diagnosing themselves as MPD, and, they claim, psychotherapists then legitimised the diagnoses. Spanos et al. further suggest that these patients exhibit increasing signs of multiple personality as therapy progresses, especially if hypnotic procedures are employed in therapy. It is suggested that the multiple personality re-enactments are then further reinforced by significant others. Thus the patients respond to environmental cues to further shape their multiple personality enactments in terms of perceived contextual demands. Spanos (1994) later termed his model the sociocognitive model.

Spanos (1996) also argues that the multiple personalities of Janet’s hysterical patients were a social creation generated by the patients in response to Janet’s leading interrogations while the patient was under hypnosis. Under the sociocognitive model, the clinical cases of Janet and other early French psychiatrists “reflected an interaction between shaping provided by therapists and patients who were eager to please and often already well acquainted with the process of moulding symptoms to meet the expectations of their doctors” (Spanos, 1996, p. 201).

To summarise, Spanos (1994) claims the onset of DID is in adulthood and arises out of therapeutic practices. The central disagreement between the traumagenic model and the sociocognitive model is whether distinct psychological states in DID are due to childhood trauma, or only a variety of elaborated social roles (Ross, 1999). The current project seeks to throw further light on these arguments. Because of the prominence of the trauma model in the aetiology of dissociative disorders in the dissociative disorders
field, the following section now introduces definitions of trauma, and the estimates of
the prevalence of childhood trauma or abuse. It also deepens the review begun in section
2.3 by considering different specific types of abuse and trauma in relation to
dissociation.

2.5 Childhood Trauma and Abuse

2.5.1 Defining Childhood Trauma and Abuse

While DSM-IV defines traumatic stressors, it only gives passing reference to
childhood abuse as “sexually traumatic events”. Some children face ongoing multiple
traumatic stressors throughout childhood. So, what can be defined as trauma or abuse?
McNally (2005) states that the process of defining trauma is “fraught with complexities”
(p.78) because trauma can be defined a number of ways. It could be defined by the
attributes of the stressor, or by the subjective response of the victim, or by both.
Alternatively, Green (1990) suggests there are three variables to consider in the stress
process: (a) an objectively defined event; (b) the victim’s subjective interpretation of the
event’s meaning; and (c) the victim’s psychological reaction to it. Briere and Scott
(2006), on the other hand, argue that, technically, only the event can be described as the
trauma, not the response to it. Also, they argue that the term “trauma” should be
reserved only for major events that are psychologically overwhelming. Herman (1997)
agrees that traumatic events are those that “overwhelm the ordinary human adaptations
to life” (p.33), and they generally involve threats to life, or threats of bodily harm, or are
a close personal encounter with violence and death. They evoke terror and the responses
of catastrophe.

The DSM-IV definition (see Appendix A8) contains the aspects mentioned by
McNally (2005) and Green (1990): that is, the event or attributes of the stressor, and also
the victim’s response to the event/stressor. However, Briere and Scott (2006) criticise
the DSM-IV definition of trauma because it does not take into consideration the fact that
many events may be traumatic even though threat to life or injury is not apparent. Briere
and Scott maintain “that an event is traumatic if it is extremely upsetting and at least
temporarily overwhelms the individual’s internal resources” (p. 4). In addition, McNally
(2005) points out that research on what constitutes trauma suggests that there is no
simple relationship between the amount of trauma experienced and the resulting symptoms, and that measuring amount of trauma is difficult. Most research asks for retrospective appraisal of exposure to trauma, but this appraisal may be distorted by the individual’s current psychological state, and especially if the abuse/trauma happened in childhood.

Questions have been raised as to what constitutes trauma or threat of trauma to an infant or small child. Trauma and threat of trauma appear to be different for each developmental stage. For example, “primary experiences of threat in infancy include the threat of separation from the caregiver and the threat of having little caregiver response to the infant’s signals of distress” (Lyons-Ruth, Dutra, Schuder, & Bianchi, 2006), a definition that would not fit the DSM-IV criteria for a traumatic event. In addition, Mulvihill (2005) states that, as well as the traumas stated in the DSM-IV criteria, other traumas such as life threatening illnesses and associated medical procedures can constitute overwhelming trauma for a child.

2.5.2 Defining Childhood Abuse in Australia

There are a number of sources that define child abuse or maltreatment in Australia. For example, Holzer and Bromfield (2007) produced a resource sheet of definitions of abusive and neglectful behaviours for researchers working in the area of child maltreatment. Definitions of child abuse have also been produced by the Victorian Department of Human Services (DHS: 2008).

The DHS defines child abuse as “…an act by parents or caregivers which endangers a child or young person's physical or emotional health or development. Child abuse can be a single incident, but usually takes place over time” (DHS, 2008, ¶1). The DHS web page goes on to describe the types of child abuse that occur:

*Physical abuse* occurs when a child suffers or is likely to suffer significant harm from an injury inflicted by a child's parent or caregiver. The injury may be inflicted intentionally or may be the inadvertent consequence of physical punishment or physically aggressive treatment of a child. The injury may take the form of bruises, cuts, burns or fractures. (DHS, 2008, Types of abuse Section, ¶1)
Sexual abuse occurs when a person uses power or authority over a child to involve the child in sexual activity and the child's parent or caregiver has not protected the child. Physical force is sometimes involved. Child sexual abuse involves a wide range of sexual activity. It includes fondling of the child's genitals, masturbation, oral sex, vaginal or anal penetration by a penis, finger or other object, or exposure of the child to pornography” (DHS, 2008, Types of abuse Section, ¶2).

Emotional abuse occurs when a child's parent or caregiver repeatedly rejects the child or uses threats to frighten the child. This may involve name calling, put downs or continual coldness from the parent or caregiver, to the extent that it significantly damages the child's physical, social, intellectual or emotional development. (DHS, 2008, Types of abuse Section, ¶3)

Neglect is the failure to provide the child with the basic necessities of life such as food, clothing, shelter, medical attention or supervision, to the extent that the child's health and development is, or is likely to be, significantly harmed. (DHS, 2008, Types of abuse Section, ¶4)

The DHS definition of neglect seems to relate more to physical neglect and not so much emotional neglect, which is lack of love, encouragement, sense of belonging, and support as described by Bernstein and Fink (1998) (see below). However, the DHS (2008) does state:

All forms of abuse are likely to result in emotional problems for the child—in particular, a lack of self esteem and distrust of adults. The longer the abuse goes on, the more serious are the effects. Abused and neglected children are more likely than other children to be self destructive or aggressive, to abuse drugs and alcohol, or become young offenders or "street kids". In some situations abuse and neglect may result in permanent physical damage. (What are the effects of child abuse? Section, ¶2)

Much of the research here and overseas that examines dissociation and other adult psychopathology and childhood abuse focuses on five aspects of child abuse: emotional abuse; emotional neglect; physical abuse; physical neglect; and sexual abuse.
(e.g., J. G. Allen et al., 2002; D. P. Bernstein, Ahluvalia, Pogge, & Handelsman, 1997; Giesbrecht, Merckelbach, Kater, & Sluis, 2007b; Irwin, 1998; Şar, Akyüz, Kundakçı, Kiziltan, & Doğan, 2004; Scroppo et al., 1998). Each of these studies assesses childhood trauma using the retrospective Childhood Trauma Questionnaire (CTQ) (D. P. Bernstein & Fink, 1998), and the CTQ is the measure used in the current study to assess childhood trauma (see Appendix A2).

### 2.5.3 Ritual Abuse (RA)

DID patients sometimes report having experienced ritual abuse (RA) (Goodwin & Sachs, 1996; Scott, 2001) and RA is purported to underlie some of the more severe dissociative disorders (e.g., Fraser, 1997; van der Hart, Boon, & Heijtmajer Jansen, 1997; Young & Young, 1997). RA is discussed here because it arises not uncommonly in discussions of severe dissociative disorders.

A number of writers have attempted to define this type of abuse, called variously: satanic ritual abuse (SRA) (Ross, 1995), sadistic ritual abuse (Sakheim, 1996), sadistic abuse (Braun, 1997) or simply, ritual abuse (RA) (Scott, 2001). The Los Angeles County Commission for Women developed a definition of RA that included the use of prolonged and repeated physical, sexual, and psychological abuse, and involving the use of rituals, which often forms part of satanic worship (Sakheim, 1996). However, Sakheim argues it is perhaps better to call it sadistic ritual abuse, because most children are abused this way in nonreligious situations, frequently within the context of their families. Another definition states the following: “Ritual abuse is the involvement of children in physical, psychological or sexual abuse associated with repeated activities (‘ritual’) which purport to relate the abuse to contexts of a religious, magical or supernatural kind” (McFadyen, Hanks, & James, 1993, p.37). McFadyen et al. suggest that not all ritual abuse of children is satanic in nature, but nevertheless appears bizarre and unbelievable to outsiders, which has the effect of deterring the victim from disclosing. Victims are also likely to believe they are in danger if they disclose (McFadyen et al.; Sakheim).

Studies relating to ritual abuse in Australia appear almost non-existent. One Australian study (Schmuttermaier & Veno, 1999) compared beliefs about ritual abuse
held by psychiatrists, psychologists and workers at a Centre Against Sexual Assault (CASA) unit. They found that there was an agreement that ritual abuse was an indicator of trauma. Brunet (2007) examined ritual abuse and dissociation within the medium of art depicting the rituals of the Masonic Lodge and Freemasonry in Australia. Her artwork (and consequent PhD thesis) was a means of working through the aftermath of ritual abuse she suffered in her family as a result of Freemasonry. Her family experience aligns with Scott’s (2001) descriptions of families who practice generational ritual abuse. In another arena, an Australian organization called Advocates for survivors of Child Abuse (ASCA) has written a paper about, and for, survivors of ritual abuse and torture (ASCA, 2006). ASCA argue that ritual abuse in Australia is at the core of controlled child prostitution and pornography. The perpetrators are mothers, fathers, relatives, neighbours, professionals who abuse positions of power. The victims are many. They are sons, daughters, siblings, grandchildren, neighbour’s children, or foster children.

Whether RA of children occurs is a debated issue (Marmer, 1997; Michelson & Ray, 1996). In the United States in the late 1980’s reports of RA increased, with subsequent questions about its veracity (Bottoms & Davis, 1997; Cozolino, 1989). This awareness was fuelled in part by investigations of SRA, which were carried out in 100 day care centres across America between 1983 and 1991 (deYoung, 1997). At that stage RA was viewed as a North American phenomenon, but began to be reported in other countries as well (Van der Hart & Boon, 1990). Many reports were considered unbelievable (Marmer, 1997; Scott, 1993).

In the Netherlands, van der Hart and Boon (1990) struggled with the credibility of RA reports, but in the late 1980’s and early 1990’s, some of their patients began to disclose such histories, and they found parallels between the reports of their own patients and the reports of North American patients. Marmer (1997), however, commented that none of his patients reported RA until they had started hearing reports from other patients or from the media in the late 1980’s and early 1990’s. Marmer cautioned against accepting at face value every report patients give about SRA, and Fraser (1997) also suggests that many reports of SRA are fabricated by highly imaginative patients who have read other’s accounts of such abuse.
Bottoms and Davis (1997) would agree with Marmer’s (1997) views. They surveyed large numbers of professionals and agencies across America (total targeted, \( N = 40,000 \); response rate = 42%-47%) and found that the threats of satanic conspiracies were greatly exaggerated. Bottoms and Davis suggest that therapy may facilitate the recovery of false ritual abuse memories. However, they do not deny that child abuse exists, even RA, but maintain that family members are the main perpetrators of child abuse rather than satanic cults. In Britain, Scott (2001) interviewed numbers of individuals who had suffered RA within and without their families. Her interviewees reported organised torture, forced abortion, murder, sexual rituals performed by many abusers in the one family, prostitution, and victims being used (by their families) in pornographic movie making. This is a way of life for many children, according to Scott, and the results perhaps demonstrate that not all reports of ritual abuse are fictitious as some suggest (e.g., Freyd, 2008).

Ross (1995) also acknowledges that there are forms of ritual abuse other than SRA, such as ritualised sexual abuse practiced by child pornographers, and he acknowledges that many of the SRA memories described by his patients are confabulated, comprising things that never really happened. He cautions therapists against being drawn into the inner hypnotic reality of their clients because there are alternative hypotheses that need to be considered for SRA. Ross states, “Satanism is…a complicated mixture of real memory, confabulation, cultural myth, and misinformation” (p.57).

Only a small number of articles were found pertaining to RA and dissociation. Of these limited studies, findings are mixed. Young, Sachs, Braun, and Watkins (1991) describe a clinical syndrome in a sample of DID patients (\( N=37 \)) who reported SRA that includes dissociative states with satanic overtones, posttraumatic stress disorder, survivor guilt, unusual fears, and substance abuse. Another study (Leavitt, 1994) found that patients (\( n=39 \)) alleging SRA reported higher levels of dissociation, in the range exhibited by patients with multiple personality disorders, than did patients (\( n=47 \)) reporting less controversial forms of childhood sexual trauma. In contrast, Lawrence, Cozolino, and Foy (1995) found no significant difference in dissociation scores between a group of adult female patients reporting CSA (with ritualism) (\( n=19 \)) and a second
group of women \( n=27 \) who reported CSA (without ritualism). These findings were in spite of reported trauma exposure being greater for the RA group. Others have also discussed cases of RA and report symptoms of DID in their patients (e.g., Fraser, 1997; van der Hart et al., 1997; Young & Young, 1997). It seems most of the literature discussing abuse or trauma and dissociation does not contain the term ‘ritual’.

This document now turns back to the overall topic of childhood abuse, and following is a description of the questionnaire used to measure childhood trauma for the current study.

2.5.4 The Childhood Trauma Questionnaire (CTQ)

A number of retrospective scales have been developed to measure childhood trauma: the CTQ (D. P. Bernstein & Fink, 1998); the Early Trauma Inventory (Bremner, Vermetten, & Mazure, 2000); and the Child Abuse Trauma scale (CAT) (Sanders & Becker-Lausen, 1995). A more comprehensive study of retrospective childhood trauma measures, both self-report and interview, is provided by Roy and Perry (2004). Only the CTQ will be discussed here. The original format of the CTQ was 70 items (D. P. Bernstein et al., 1994), and since then a shorter 28-item scale, the CTQ-SF, has been developed (D. P. Bernstein & Fink) and validated (D. P. Bernstein et al., 2003).

The CTQ is a screening measure designed to detect cases of abuse and neglect. According to D. P. Bernstein and Fink (1998), the items inquiring about each type of trauma are expected to facilitate recall of childhood memories. The CTQ items are designed to reflect common definitions of child abuse and neglect as found in the childhood trauma literature. There are five subscales: (a) emotional abuse, measuring verbal abuse involving humiliating, demeaning, or threatening behaviour towards a child; (b) physical abuse, referring to bodily assault that poses risk or injury to a child; (c) sexual abuse, measuring sexual contact or conduct between a child and older person; (d) emotional neglect, measuring a failure to provide a child’s basic psychological and emotional needs; and (e) physical neglect, measuring a failure by caregivers to provide the child’s basic physical needs. The CTQ also includes a 3-item minimization/denial scale designed to identify individuals with a tendency to provide socially desirable responses.
The CTQ has been compared to other self-report trauma inventories in a number of studies. Lipschitz, Bernstein, Winegar, and Southwick (1999) compared the CTQ with the Traumatic Events Questionnaire, Adolescent version (TEQ-A), and concluded that the CTQ is more sensitive than the TEQ-A for detecting physical and sexual abuse cases of lesser severity. DiLillo et al. (2006) found a similar result when comparing the CTQ with the Computer Assisted Maltreatment Inventory (CAMI). The CTQ classified more participants as sexually abused than did the CAMI, however, the opposite effect was found for physical abuse. The extra sensitivity is perhaps because of the use of a 5-point Likert scale for the CTQ rather than a yes/no response for the presence/absence of trauma as used in the TEQ-A, and CAMI.

The CTQ has demonstrated adequate reliability for all subscales plus total scale score for the 70-item version (D. P. Bernstein et al., 1997; Paivio & Cramer, 2004) and also the 28-item short form version (D. P. Bernstein et al., 2003). Paivio and Cramer conclude that the CTQ adequately assesses the full range of severity of diverse childhood maltreatment experiences. However, the CTQ does not ask for age at time of trauma, or parameters of abuse. These variables are thought to influence the seriousness of subsequent psychopathology in disorders such as BPD (C. A. Roy & Perry, 2004) and DID (Chu, 1998b). Normal population mean scores have been shown to be lower for the five subscales when compared to a comparable psychiatric sample (D. P. Bernstein et al., 2003) (see Table 2.1).

Table 2.1

Means and Standard Deviations for the CTQ Subscales for a Normative Community Sample and a Psychiatric Inpatient Sample (D. P. Bernstein et al., 2003)

<table>
<thead>
<tr>
<th>CTQ subscale</th>
<th>Normative adolescent community group (n=579)</th>
<th>Adolescent psychiatric inpatient group (n=396)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional abuse</td>
<td>1.78 (1.1)</td>
<td>2.5 (1.4)</td>
</tr>
<tr>
<td>Physical abuse</td>
<td>1.42 (.8)</td>
<td>1.76 (1.2)</td>
</tr>
<tr>
<td>Sexual abuse</td>
<td>1.38 (1.8)</td>
<td>1.5 (1.3)</td>
</tr>
<tr>
<td>Emotional neglect</td>
<td>2.0 (1.4)</td>
<td>2.7 (1.3)</td>
</tr>
<tr>
<td>Physical neglect</td>
<td>1.34 (.7)</td>
<td>1.64 (.8)</td>
</tr>
</tbody>
</table>
2.5.5 Prevalence of Childhood Abuse

The prevalence of childhood abuse appears to have been underestimated until changing political forces in the 1970s (Herman, 1997). According to C. D. Baker (2002), pre-1970s stories on maltreated children would not have been covered by the media or by any systematic research, because of the “distasteful nature of the topic” (p. 20), and she also argues that it is difficult to ascertain the current prevalence of CSA in the community because of the difficulties in defining childhood abuse and the many different methodologies employed by studies in estimating its prevalence. Alpert (1990) highlights these discrepancies with reported CSA, stating that while it is prevalent, estimates range from 6% to 62%. He also cites the differences in definitions and research methods for these discrepancies, with higher incidences of reporting when using face-to-face interviews and with more specific questions asked. Following are studies that show estimates of abuse in the general population and others that give estimates in psychiatric populations.

2.5.5.1. Prevalence of childhood abuse in the general population.

A number of writers argue that child sexual and physical abuse is prevalent and problematic in North American society (e.g., Alpert, 1990; Briere & Elliott, 2003; Chu, 1998b), although Finkelhor (1979) states that prevalence rates for CSA had not increased from the 1940s to the 1970s. The studies mentioned in these prevalence sections demonstrate difficulties in estimating overall incidence and prevalence of child sexual abuse because of methodological problems (J. D. G. Goldman & Padayachi, 2000). The different sampling methods used, whether reporting of incidents to authorities, or retrospective self reports, produce discrepant results, so accurate estimates are difficult to attain. Also, different definitions of abuse-type produce different results. Many of the estimate studies examine only sexual abuse as a blanket term, while some examine both non-contact and contact sexual abuse and others only contact sexual abuse, giving rise to different prevalence rates. Physical abuse/neglect and emotional abuse/neglect are often not considered in child abuse studies. Goldman and Padayachi reported discrepancies of prevalence rates of CSA for both males and females, with
reports of between 3% to 37% and 8% to 71% respectively. Finkelhor (1994) reviewed 21 studies from 21 different countries and found widely varying prevalence rates for CSA. Sexual abuse histories were reported in at least 7% of the females and 3% of the males, and ranged up to 36% of the women in an Austrian study and 29% of men in a South African study. Finkelhor found it difficult to make direct comparisons between results for different countries because of the variation in survey methodology and definitions of sexual abuse. S. V. Hunter (2006) also asserts that prevalence of CSA varies widely from 2% to 62% depending on the definition of the abuse type and sampling method used.

Another problem with CSA reporting is unreliability in the reporting of child abuse (Fergusson, Horwood, & Woodward, 2000). Fergusson et al. found that, while those young adults who did not experience child abuse did not falsely report being abused, those who were abused provided unreliable reports. The probability of a false negative response was about 50%. Fergusson et al. also assert that to base estimates of abuse prevalence on a single report are likely to substantially underestimate the true prevalence of abuse. In addition, Bromfield and Higgins (2004) state that legislative changes to child protection laws in Australia and overseas render child protection data as unreliable and invalid sources for statutory or research data for prevalence of child maltreatment.

Notwithstanding, numbers of studies have attempted to estimate abuse prevalence. Finkelhor’s (1979) study (N = 796; 530 females, 266 males) found that nearly 20% of girls were sexually victimised in childhood and 9% of boys. He also found that the perpetrators were mostly men and were known to the children. According to Alpert (1990), the first truly random sexual abuse survey was conducted in the mid 1980s by Diana Russell. Of 930 women interviewed about their childhood experiences, 38% reported contact sexual abuse by an adult relative or stranger by age 18 years, and 28% by age 14 years. The study also found that 54% of women experienced contact and non-contact sexual abuse by age 18 years. Another study in a general population sample

\[\text{\textsuperscript{4}}\]

\[\text{\textsuperscript{4}}\] It is noted that in the prevalence studies presented in this section percentage estimates appear to differ according to the gender makeup of samples, and with method of data collection.
(N = 2,626) (Finkelhor, Hotaling, Lewis, & Smith, 1990) found that 27% of women and 16% of men disclosed a history of sexual abuse, and a study of the prevalence, types and severity of childhood abuse in a US indigenous population (N = 234) (Duran et al., 2004) found that 76.5% reported some type of childhood abuse or neglect, and over 40% reported exposure to severe maltreatment.

In a Canadian community sample (N = 9953), MacMillan et al. (1997) found that childhood abuse was common, but that males experienced more childhood physical abuse (males, 31.2%, females 21.1%), while females experienced more CSA (females, 12.8%, males 4.3%). Reports of severe physical abuse were similar for both males and females (10.7%, and 9.2% respectively), but severe sexual abuse was reported by more females than males (11.1% and 3.9% respectively). In contrast, Briere and Elliot (2003), in a general population study (N=935), found that 14.2% of males reported experiences that met the criteria for CSA as did 32.3% of the females, and 22.2% of males and 19.5% of females reported experiences that met the criteria for physical abuse.

General population estimates of childhood abuse in other countries appear similar to estimates in North America, although it is again difficult to compare because of different methodologies. A study of the prevalence of child abuse exposure among Thai people (N = 202) (Jirapramukpitak, Prince, & Harpham, 2005) found that 38% reported experiencing some sort of abuse in childhood, 5.8% reported being subjected to sexual penetration, 11.7% reported being physically abused, and 31.8% emotionally abused. Gender differences were not reported. In Turkey, a study examined the prevalence of childhood abuse among a female general population sample (N = 628) (Akyüz et al., 2005). They found that the most frequently reported trauma type was neglect (33.9%), followed by emotional abuse (21.5%), physical abuse (24.5%), and sexual abuse (2.5%). While overall prevalence estimates are difficult to determine because of the different methodologies and gender splits, within the above studies, prevalence rates range from: 2.5% to 38% for sexual abuse; 10.7% to 31.2% for physical abuse; 21.5% to 31.8% for emotional abuse; and 33.9% for neglect. Another study listed a prevalence rate of 40% for severe maltreatment but does not explain type of severe maltreatment.
2.5.5.2. Prevalence of childhood abuse in clinical populations.

A history of exposure to trauma is more prevalent in clinical samples than in the general population (Gold, 2004; Shack, Averill, Kopecky, Krajewski, & Gummattira, 2004). For example, Shack et al. (2004) conducted a childhood trauma prevalence study \( (N = 271) \) in a sample of both male \( (n = 160) \) and female \( (n = 111) \) psychiatric patients. Those reporting some form of abuse were 40.6% male and 70.3% female. The prevalence of experiencing both physical and sexual abuse was 17.5% (males) and 45.9% (females), physical abuse alone was 15.6% (males) and 18.9% (females), and sexual abuse alone was 7.5% (males) and 5.5% (females).

In Norway, Reigstad, Jørgensen, and Wichstrøm (2006) contrasted official registers of diagnosed childhood sexual and physical abuse (sample was total child psychiatric population of Norway for 2000 and 2001, \( N = 10,236 \)), with retrospective self-reports of abuse and neglect from a representative clinical sample of adolescents \( (N = 129) \) during the same time period. In the total Norwegian psychiatric population, the prevalence of diagnosed sexual abuse both inside \( (1.6\%) \) and outside the family \( (1.9\%) \) was low, and physical abuse diagnoses were lower \( (0.4\%) \). In contrast, the self reports of abuse and neglect by the adolescents were considerably higher \( (60.2\%) \), with 25.5% reporting experiencing more than one type of abuse. Physical abuse was reported by 33.9% of the sample, sexual abuse by 28.8%, and neglect by 28.1%.

In reporting estimates of abuse prevalence, the form of data collection is an important consideration (refer to Reigstad et al., 2006). The above studies, both in the general community and in the clinical populations, highlight some of the difficulties encountered in estimating the prevalence of childhood trauma.

2.5.5.3. Prevalence of childhood abuse in Australia.

While much of the research and literature on child abuse comes from North America, childhood abuse is not only a North American phenomenon. It is also reported to be prevalent in Australia. However, prevalence studies in Australia are scant and most examine only CSA (e.g., Dunne, Purdie, Cook, Boyle, & Najman, 2003; J. D. G. Goldman & Padayachi, 1997; R. J. Goldman & Goldman, 1988).
One prevalence study that assessed CSA in Victoria, Australia (R. J. Goldman & Goldman, 1988), \((N = 991, \text{first year social science college students})\) used an Australian version of Finkelhor’s (1979) questionnaire to assess prevalence of CSA experiences. They found that 82% of students reported some kind of sexual experience with another person before the age of 13 yrs, 60% being with other children. Twenty eight percent of girls and 9% of boys reported childhood sexual experiences with adults. The majority of abusers (90%) were men, 76% of whom were known to the children. A similar study conducted in Queensland, Australia (J. D. G. Goldman & Padayachi, 1997) \((N = 427 \text{ college students, 140 males, 287 females})\) found that 39% of females and 13.6% of males reported unwanted non-contact and contact sexual experiences.

Fleming (1997) found in a sample of randomly selected women \((N = 710)\) that 20% had experienced CSA, 2% had experienced acts of sexual penetration, 71% were under the age of 12 years at time of first CSA experience, and that most perpetrators were males who were usually known to the child. Only 10% of the CSA experiences were ever reported to the police, a doctor or other helping agency, which highlights the difficulty in using official reporting statistics as prevalence estimates, and indicates the need for health care professionals to be aware that abuse history might be more common in women in general. Mazza, Dennerstein and Ryan (1996) concur about the need for doctors to be more aware of the abuse histories of their patients. They conducted a survey among general medical practitioners (GPs) \((N = 15 \text{ general practices})\) in Melbourne, Australia, to determine the prevalence of domestic violence, childhood abuse, and sexual assault experienced by women attending GPs \((N = 3,026)\). In the study, 25% reported experiencing domestic violence, 13% had experienced rape/attempted rape, 10% reported being severely beaten in childhood, and 28% had experienced childhood sexual abuse involving physical contact. Only 27% of the sample of women disclosed partner or childhood physical abuse, and only 9% disclosed sexual abuse to their GPs.

A more recent study (Dunne et al., 2003) used a community-based sample \((N = 1784; 876 \text{ males, 908 females})\) to estimate age-cohort differences in the prevalence of reported CSA experiences of men and women aged 18-59 years. They reported that 33.6% of women and 15.9% of men reported non-penetrative CSA experiences and that
12% of women and 2% of men reported penetrative CSA experiences. Dunne et al. cited these figures as evidence of a decline in the underlying rate of CSA in Australia, which they also claim complement official statistics that show a substantial decline in recent years. Elsewhere, there are also suggestions of a decline in substantiated cases of child maltreatment since a peak in the early 1990s (Jones, Finkelhor, & Halter, 2006). This decline is attributed to direct prevention efforts, economic improvements, more aggressive criminal justice efforts, dissemination of psychiatric medication, and generational changes.

Similar to methodological and definitional problems in overseas studies, Andrews, Gould, and Corry (2002) also noted the methodological difficulties in estimating prevalence of CSA in Australia. These problems perhaps relate partially to the reporting of three levels of severity: “Non-contact abuse includes sexual solicitation or exposure by an older person; contact abuse involves genital touching or fondling; and penetrative abuse includes oral, anal or vaginal intercourse by an older person” (p.458). Andrews et al. consequently calculated an adjusted prevalence estimate of CSA in seven Australian studies. This was 5.1% for males and 27.5% for females, and corresponded with rates in comparable countries. The prevalence rates for contact plus penetrative abuse were 3.6% in males and 17.9% in females.

Australian Institute of Health and Welfare (AIHW) (2009) statistics show that reporting of child abuse (of any type) in Australia has increased steadily over the past decade from 103,302 notifications in 1998-99 to 317,526 in 2007-08. The number of total finalised investigations, total substantiations, and numbers of children on orders has also increased similarly over the same period, although to a lesser extent than has the notifications. These statistics would appear to contradict the claim by Dunne et al. that there is a substantial decline in official statistics in recent years. However, if there is underreporting of child abuse as is suggested (e.g., Fleming, 1997; Mazza et al., 1996), then these official government figures are likely to be conservative.

2.5.6 Effects of Trauma and Abuse

Studies have examined the consequences of trauma in the general population (e.g., Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995). In the United States, there is
a lifetime prevalence of PTSD of 7.8% within the general population following trauma\(^5\), which is often persistent throughout life. This was higher than originally thought and is also associated with comorbidity of other psychiatric disorders, that is, a comorbidity of at least one other disorder for 88.3% of the men and 79% of the women. The most prominent traumas associated with PTSD for men were rape, combat exposure, childhood neglect, and childhood physical abuse. For women, the traumas likely to result in PTSD were rape, sexual molestation, physical attack, being threatened with a weapon, and childhood physical abuse as well as being 13 times more likely to be the victims of sexual abuse (Kessler et al.).

Chu (1998b) states that the most severe posttraumatic and dissociative disorders occur as a result of prolonged childhood abuse, chronic combat experiences, and long-term battering relationships. Macmillan et al. (2001) concluded that a childhood abuse history increased the likelihood of lifetime psychopathology and that this association was stronger for women than for men. Loewenstein and Putnam (1990) compared 21 males patients with 128 female patients who had extensive childhood histories of sexual and physical abuse. They found that males tended to have more alcoholism and antisocial behaviour, and had more subtle clinical presentations with fewer alter personalities than did females.

Many other writings highlight the long-term effects of childhood abuse into adulthood, such as posttraumatic effects, cognitive distortions, depression, anxiety, dissociation, detachment, DID, substance abuse, suicidality, somatoform disorders, rheumatoid arthritis, irritable bowel syndrome, sexual disorders, relationship disturbances (e.g., Briere, 1992; Briere & Elliott, 2003; Briere & Scott, 2006; Carlson et al., 2001; Goodwin & Sachs, 1996; Herman, 1997; Levine, 1997; McNally, 2005; Mulder et al., 1998; Nijenhuis, 2006; Ross, 2000/2007; Thompson et al., 2003), chronic pain (Sachs-Ericsson, Kendall-Tackett, & Hernandez, 2007), and eating disorders, substance abuse, phobias, multiple personality disorders, irritable bowel syndrome,

\(^5\) Both PTSD and MPD are thought to be trauma based disorders, but there are distinct differences in epidemiology and demographics (1993). PTSD is not a dissociative disorder but it is suggested it should be put with the dissociative disorders (and other related disorders such as somatisation and depression) into a separate trauma disorder section in the DSM-IV (Ross, 1997).
rheumatoid arthritis, and autoimmune disorders (Mulvihill, 2005). Another study found similar results in the Netherlands (Afifi et al., 2007), and in New Zealand, a study found that child abuse is related to some of the most severe forms of pathological symptomatology in adulthood, such as characteristic symptoms of schizophrenia (Read, Agar, Argyle, & Aderhold, 2003).

In reviewing 45 studies examining outcomes of abuse on children, Kendall-Tackett, Williams, and Finkelhor (1993) demonstrated that sexually abused children have more symptoms than non-abused children. They exhibited symptoms such as PTSD, fears, behavioural problems, sexualised behaviours, and poor self-esteem. Long term effects of abuse reported by Browne and Finkelhor (1986) were such things as anxiety, depression, anger and hostility, self-destructive behaviour, a tendency towards revictimisation, difficulty trusting others, and feelings of isolation and stigma. Longitudinal studies have shown that some of this symptomatology declines following disclosure of the abuse (Finkelhor, 1990).

These studies support earlier work by Briere (1992), who maintains that children, like adults, experience significant psychological distress and dysfunction when traumatised. However, unlike adults, children experience the trauma at a critical time “when assumptions about self, others, and the world are being formed; when their relations to their own internal states are being established; and when coping and affiliative skills are first acquired” (Briere, p.17). Briere argues that posttraumatic reactions impact on the child’s subsequent psychological and social development giving rise to potentially dysfunctional development that impacts them through their lives.

Much research is based on retrospective self-reports of the effects of childhood trauma (e.g., Anda et al., 2006; Vythilingam et al., 2002). However, brain studies of children and adults show changes to different parts of the brain that occur when a child or adult is exposed to overwhelming trauma (e.g., Richert, Carrion, Karchemskiy, & Reiss, 2006). Richert et al. found a significantly larger volume of grey matter in the delineated middle-inferior and ventral regions of the prefrontal cortex (PFC) of children suffering from PTSD than in control children. They also found a corresponding decreased volume of grey matter in the dorsal PFC, which correlated with increased functional impairment scores. In addition, Bremner (1999) found that, in adults,
stress/abuse damages the hippocampus in the brain. He found smaller hippocampal volume in those with PTSD, for example, Vietnam War Veterans, when compared with a matched control sample. Bremner and others (e.g., Driessen et al., 2000; Vythilingam et al., 2002) have also found similar results in women who have experienced severe and prolonged physical and/or sexual abuse in childhood. Therefore, it seems that trauma damages the PFC in children, and the hippocampus in children and adults. Some studies also show that childhood neglect interrupts brain development and has long-term adverse consequences (e.g., Paardekooper & de Jong, 1999; Perry, 2006; Perry, Pollard, Blakley, Baker, & Vigilante, 1995; Rutter et al., 1998; Rutter et al., 1999). The nature, timing and extent of neglect in children are all critical in determining the nature and extent of deficits suffered (Perry & Pollard, 1997).

2.6 Childhood Abuse and Dissociation

Child abuse as an overarching construct is not usually studied in relation to dissociation. It is usually broken down into components such as sexual abuse, physical abuse and/or emotional abuse with many studies combining and comparing different types. Therefore, the following sections present research that examines subtypes of child abuse contained in the CTQ in relation to dissociation; however, sexual abuse is the primary focus of the section.

2.6.1 Childhood Sexual Abuse (CSA)

A range of studies conducted in both non-clinical and psychiatric populations, conclude that experiencing sexual abuse in childhood is linked to high levels of dissociation in adulthood. Two non-clinical studies (Briere & Runtz, 1988; Roesler & McKenzie, 1994) examined the effects of sexual abuse on dissociation. Briere and Runtz found that the women (N = 278) who reported having had sexual contact with adults prior to age 15 years also reported higher dissociation levels than did the non-abused women. The dissociation levels increased if the CSA was more prolonged, forceful, and severe. Likewise, Roesler and McKenzie (N = 188) found that dissociative symptomatology was higher in groups experiencing CSA than in groups reporting childhood nonsexual abuse. They found that use of force by the perpetrator was the
single most significant individual sexual abuse variable. Sexual abuse was a significant predictor of all symptom measures, especially dissociation.

Studies within psychiatric populations have also found that those who are abused more severely, more frequently, and at an earlier age of onset experience the highest dissociation levels as adults (e.g., Chu et al., 1999; Kirby et al., 1993). Chu and Dill (1990) tested for childhood physical abuse alone, sexual abuse alone, and physical plus sexual abuse in relation to dissociation. All were significant predictors of dissociation scores but physical abuse was the weakest and the combined physical and sexual abuse group showed the strongest link with high dissociation scores. They also found that those abused by family members were more dissociative than those abused by someone other than a family member.

Carlson et al. (2001), in a sample of psychiatric inpatients, measured sexual abuse, physical abuse, and neglect in relation to PTSD and dissociation, and found that violent sexual abuse and neglect predicted higher dissociation scores, whereas violent physical abuse predicted more severe PTSD symptoms, which concurs with the studies on physical abuse (see below). In another study of sexual abuse survivors (\( N = 51 \) in-patient women), Anderson et al. (1993) found that 88.2% of the women were diagnosed with a dissociative disorder and 54.9% of these had a diagnosis of DID; and in a study comparing male (\( n = 21 \)) and female (\( n = 128 \)) patients diagnosed with DID, both genders reported extensive childhood histories of sexual abuse (85% of males and 93% of females) (Loewenstein & Putnam, 1990). However, similar percentages of these patients also reported histories of physical abuse and neglect and emotional abuse. With no differentiation between types of abuse and outcomes, it is difficult to say that sexual abuse alone was responsible for higher dissociation scores.

In contrast, the results of some studies question the conclusion that sexual abuse is directly associated with higher dissociation scores or symptoms (e.g., Mulder et al., 1998; Rhue, Lynn, & Sandberg, 1995; Romans et al., 1999). Mulder et al., in a community sample (\( N = 1028 \)), measured childhood sexual and physical abuse, and dissociation. They found that 6.3% of the sample experienced more frequent dissociative symptoms than normal. These 6.3% experienced 2.5 times more sexual abuse, 5 times more physical abuse, and their rate of psychiatric disorders was 4 times higher than the
rest of the sample. Physical abuse and current psychiatric illness were directly related to higher dissociation scores, but sexual abuse was not. It was, instead, related to dissociation through its associations with current psychiatric illness and physical abuse. Therefore, Mulder et al. questioned the hypothesis that CSA is directly related to adult dissociative symptoms.

Similarly, Romans et al. (1999) found that CSA was associated with immature defense styles in their sample of women, but not higher dissociation scores, and Rhue et al. (1995) argue that only a small proportion of children who experience childhood sexual and physical abuse go on to develop dissociative disorders in adulthood. They studied a sample of physically abused, sexually abused and non-abused children ($N = 39$), and assessed sexual abuse, physical abuse, dissociation and fantasy proneness. They found no evidence for a close link between sexual abuse and dissociative symptoms, though there was evidence of greater dissociative symptomatology in those who were physically abused. The following types of child abuse have also been researched in relation to dissociation, but the literature is more scant than that for sexual abuse.

### 2.6.2 Physical Abuse and Neglect

Childhood physical abuse is often studied in conjunction with sexual abuse (e.g., S. Kaplan & Pinner, 1996). Both are reportedly relatively common in the general population and are associated with a wide range of psychological symptoms (Briere & Elliott, 2003). Physical abuse alone has been found to be a significant predictor of higher dissociation scores (e.g., Carlson, Armstrong, Loewenstein, & Roth, 1998; Foote et al., 2006; Kirby et al., 1993).

There are, however, mixed findings across studies examining associations between physical abuse and dissociation. Two studies found that physical abuse was more predictive of dissociation than was sexual abuse, and in fact, CSA was not related to dissociation (Mulder et al., 1998; Rhue et al., 1995) ($N = 39$ children, and $N = 1,028$ adults respectively). In contrast, Keaney and Farley (1996) ($N = 53$) found that physical abuse was not related to higher dissociation scores, and another study found it was related to more severe PTSD symptoms rather than to dissociation (Carlson et al., 2001). Studies have also found that childhood physical abuse or bodily threat increases the
likelihood of an individual developing somatisation disorder (R. J. Brown, Schrag, & Trimble, 2005; Nijenhuis, van der Hart, Kruger, & Steele, 2004).

Physical neglect of infants and young children has long-term negative, psychological, cognitive, emotional and physical effects (Rutter et al., 1998; Rutter et al., 1999). However, little research has been published relating to physical neglect and dissociation other than studies by Akyüz et al. (2005) and Carlson et al. (2001), who found that physical neglect and sexual abuse together predicted higher DES scores.

### 2.6.3 Emotional Abuse and Neglect

A number of studies report findings relating emotional abuse to dissociation. Childhood emotional abuse was found to be a significant predictor of a dissociative disorder in the following: a sample of women who report childhood psychological abuse (Ferguson & Dacey, 1997); psychiatric in-patients with a history of drug abuse ($N = 104$) (Tamar-Gurol, Sar, Karadag, Evren, & Karagoz, 2008); and among alcohol dependent patients ($N = 111$), childhood emotional abuse, neglect, and sexual abuse were more frequent in a dissociative disorder group than among non-dissociative patients (Evren et al., 2007). Some studies have found emotional abuse relates to elevated absorption scores (J. G. Allen et al., 2002; Kunzendorf, Hulihan, Simpson, Pritykina, & Williams, 1997), and others found it relates to depersonalisation disorder (Simeon, Guralnik, Schmeidler, Sirof, & Knutelska, 2001), somatisation disorder (R. J. Brown et al., 2005), and conversion disorder (Moene, Spinhoven, Hoogduin, Sandyck, & Roelofs, 2001). In schizophrenic patients emotional abuse showed a significant correlation with dissociation scores ($N=30$) (Schäfer et al., 2006), and in BPD patients higher dissociation scores were related to emotional and physical abuse, and emotional neglect, but not sexual abuse ($N = 139$) (S. Watson, Chilton, Fairchild, & Whewell, 2006).

Emotional neglect has also been examined. Draijer and Langeland (1999) found, in a sample of psychiatric inpatients ($N = 160$), that while dissociation was trauma related, it was also neglect related (specifically to maternal dysfunction). Other findings regarding emotional neglect show that it is also related to: tendency to self-harm and higher dissociation scores (Gratz, Conrad, & Roemer, 2002; Nicholls, 2002; Polk &
Liss, 2007); more severe dissociative symptoms in those who experience childhood sexual and physical abuse (Draijer & Langeland, 1999); and to somatoform dissociation (Nijenhuis, Van der Hart, & Kruger, 2002; Nijenhuis et al., 2004). However, Armstrong (1994) argues that MPD arises out of multiple types of abuse: that is, a childhood history of continuous and severe physical, sexual and emotional abuse, and not one type of abuse alone.

In summary, as measured on the CTQ, various subtypes of abuse have been identified. A review of relevant literature shows that each of these separately has plausible links to pathological dissociation. Specifically, a range of studies support the conclusion that CSA is related to dissociative disorders. Despite some findings to the contrary, based on research and theory it could be predicted that CSA would be associated with pathological dissociation. It is also plausible that the other subtypes could also be associated with increases in dissociation scores.

2.7 Summary of Chapter 2

Although the literature is still bedevilled by definitional problems, the thrust of empirical research suggests that trauma in general, and sexual abuse in particular, is likely to have an impact on dissociation levels in individuals experiencing this type of abuse. Yet, while prior literature points to the fact that childhood abuse, especially sexual abuse, contributes to increased dissociativity, controversies and debates have raged for over a century as to the cause of dissociative disorders. Unfortunately the strongly polarised debate between traumagenic and sociocognitive explanations might have discouraged systematic investigation of person variables as mediators/moderators of dissociation responses. After examining these different theories about the aetiology of dissociative disorders it seems that the traumagenic and social cognition models, while seeming to oppose each other, might each have relevancy in this debate. Perhaps there are factors other than childhood abuse involved in the development of dissociative disorders; factors such as individual vulnerability and adaptability.
CHAPTER THREE: AETIOLOGY OF DISSOCIATIVE DISORDERS,  
PART 2: VULNERABILITY AND ADJUSTMENT

3.1 Overview

The previous chapter examined the literature in relation to childhood trauma and dissociation, and the traditionally competing sociocognitive model of dissociation. However, as stated in the concluding section of Chapter 2, the evidence is not all in favour of childhood trauma being the sole contributor to higher dissociation scores and the development of dissociative disorders. In the following chapter, three possible further predictors of dissociation are reviewed. Personality, specifically vulnerable personality, is first reviewed along with trauma and dissociation. Fantasy proneness is then discussed in relation to personality, trauma and dissociation. Then, because not all individuals who have experienced childhood trauma develop a dissociative disorder, the concept of resilience is reviewed and discussed.

3.2 Background

A number of writers (e.g., Briere, 2006; Cima, Merckelbach, Hollnack, & Knauer, 2003; Stern, 1984; Waller et al., 1996) have questioned whether childhood trauma alone can account for the development of pathological dissociation. In fact some research found little or no relationship between childhood trauma and pathological dissociation (e.g., R. C. Johnson et al., 1995; Mulder et al., 1998; Romans et al., 1999). For example, Collishaw et al. (2007) \((N = 2,307)\) found, using both prospective longitudinal data in childhood, and self report retrospective data in adulthood, that not all traumatised children who suffered severe childhood abuse went on to develop adult psychopathology. Over 10% of the sample reported experiences of childhood abuse; 55.5% of these children developed psychopathology, but 44.5% did not. This 44.5% of those who experienced childhood abuse were classified as resilient. The Collishaw et al. study highlights the possibility that other factors are involved in the development of psychopathology, or conversely, its prevention. General risk factors were found to be such variables as family adversity and high neuroticism scores.
Some prior research has demonstrated that factors other than trauma constitute risk or vulnerability factors for dissociative psychopathology. For example, a number of personality factors have shown a relationship with dissociation, such as neuroticism (Groth-Marnat & Michel, 2000; Irwin, 1998; Ruiz, Pincus, & Ray, 1999), fantasy proneness (e.g., Geraerts, Merckelbach, Jelicic, Smeets, & van Heerden, 2006), and dispositional variables such as hypnotisability and some facets of openness to experience (Kihlstrom, Glisky, & Angiulo, 1994). Kunzendorf et al. (1997) also suggest that absorption, which is related to fantasy proneness, may be a risk factor for pathological dissociation in response to traumatic stress. Kihlstrom et al. (1994) mention that more complex models relating personality to psychopathology may be appropriate. Therefore, also included in this chapter is the construct of resilience, which measures adaptation rather than vulnerability.

### 3.3 The Five Factor Model of Personality (FFM)

Contemporary structural models of personality derive from two traditions (Goldberg, 1993). The lexical tradition (e.g., Allport & Odbert, 1936; Cattell, 1943) is based on the hypothesis that the structure of traits is contained in everyday language. By factor analysing ratings on thousands of relevant words, it is argued that basic dimensions of personality will arise. In the alternative tradition, questionnaires to assess important personality traits were derived from prominent theories of personality (e.g., Eysenck, 1981; Eysenck, 1983; Eysenck, 1990).

Over the last decade, consensus has emerged that five dimensions might be both sufficient to cover personality space and to represent the deductions from major theoretical approaches (Digman, 1990). This representation has come to be known as the five-factor model (FFM) of personality (see, for reviews, Costa & McCrae, 1992; McCrae & John, 1992). The current project will not cover the many aspects of personality in current research. The construct of personality is confined to the dominant model within structural/trait approaches to personality. The popular Five Factor Model (FFM), and the literature pertaining to the FFM in relation to trauma, dissociation and resilience is reviewed next.
The FFM had its beginnings in work conducted by Cattell, in the 1940’s, and Eysenck in the 1970’s. They each found markedly different differing numbers of factors (16 factors and 2 factors respectively), but the majority of research in the personality field now consistently finds five broad personality dimensions (Digman, 1990; Goldberg, 1993). This view has had opposition from those who argued that personality traits cannot be viewed aside from situational variables (Mischel, 2004). Also, Block (1995), questioned the algorithmic method of factor analysis that is commonly used to extract the five factors from their descriptors. Others also question the claim that the FFM is a comprehensive framework for examining personality, claiming it is too simple, especially for assessing personality disorders (e.g., Ben-Porath & Waller, 1992; Butcher & Rouse, 1996; Waller & Zavala, 1993). However, for the purposes of measuring personality in the current research, the FFM is utilised because it is frequently used in personality research.

The FFM was developed from personality-descriptive terms in the lexicon (Digman, 1990; Goldberg, 1993). Cattell, in the 1940’s, studied 4,500 trait descriptive terms (Goldberg, 1993) and reduced these terms to 16 primary factors (16PF) (Digman, 1990). However, later analyses of Cattell’s variables found only five replicable factors (e.g., Digman & Takemoto-Chock, 1981; Fiske, 1949; Norman, 1963; G. M. Smith, 1967; Tuples & Christal, 1992/1961). The first factor analytic study of personality was conducted by Thurstone (1934) using 60 adjectives, which yielded five factors. Fiske (1949) then also found five factors, but his research was largely ignored, as was the work by Tuples and Christal in the late 1950’s (Tuples & Christal, 1958; Tuples & Christal, 1992/1961). Eventually Norman (1963) replicated the five factors found by Tuples and Christal. Others then, independently, also found five factors (e.g., Borgatta, 1964). G. M. Smith (1967) and Wiggins, Blackburn, and Hackman (1969) subsequently used one of the characteristics of the FFM (Conscientiousness) to predict educational achievement, which Digman (1990) viewed as an endorsement of the FFM. The five factors are discussed in the following sections.

Subsequently, most of the work on the five factor model has been conducted by Robert McCrae and Paul Costa (O’Connor, 2002). McCrae and Costa (1985) acknowledged the viability of the FFM and subsequently developed a FFM personality
inventory, known as the NEO-PI-R (McCrae & Costa, 1987), that included 240 items assessing the five personality factors. They have also developed a shortened version of the inventory containing 60 items, the NEO-Five Factor Inventory (NEO-FFI) (Costa & McCrae, 1992). The shortened form was used to measure personality in the current project (see Appendix A3).

Costa and McCrae (1992) describe the five personality domains that are thought to account for most differences in adult personality as: neuroticism (N); extraversion (E); openness to experience (O); agreeableness (A); and conscientiousness (C). N is the general tendency to experience negative affect (e.g., fear, anger, sadness, and guilt), emotional instability and vulnerability, self-consciousness, and poor impulse control. E is the tendency to experience positive emotions, warmth towards others, gregariousness, assertiveness, sensation seeking, and activeness. O refers to the tendency to be open to fantasy, differing values, new ideas, and activities, and to be aesthetic, and receptive to inner feelings. A includes trust in others, straightforwardness, compliance, modesty, and tender-mindedness, and C is the tendency to be competent, orderly, dutiful, striving for achievement, deliberate and self-disciplined. The five domains in the NEO-FFI, are each made up of the 12 items with the largest structure coefficients for each of the five factors (Costa & McCrae, 1992). Of interest in the current project is the association between these five factors of personality and dissociation.

3.3.1 Personality and Dissociation

Correlations between dissociation and FFM traits have been found in a number of studies. N in particular appears to be positively associated with dissociation. That is, those who experience negative affect (e.g., fear, anger, sadness, and guilt), emotional instability and vulnerability, self-consciousness, and poor impulse control are more likely to report higher dissociation scores (e.g., de Silva & Ward, 1993b; Kwapil, Wrobel, & Pope, 2002; Modestin, Lotscher, & Erni, 2002; Ruiz et al., 1999). de Silva and Ward also found that E was not associated with higher dissociation scores. Similarly, Groth-Marnat and Jeffs (2002) found that N and dissociation are positively related, but that C and dissociation were negatively related. They also predicted that E
and O would be significant positive predictors, but this prediction was not supported; N was the strongest personality predictor of dissociation.

In contrast to Groth-Marnat and Jeff’s findings regarding O and dissociation scores, Ruiz et al. (1999) found that dissociation scores were positively associated with O and N. They also found dissociation to be negatively associated with E, A, and C, but with only modest zero-order correlations. Similarly, Goldberg (1999) reported that dissociative experiences were positively related to N and Imagination (the fantasy facet of O), and negatively related to C, and A.

Kwapil et al. (2000) also found a positive correlation between dissociation scores and N, which accounted for the greatest proportion of variance in DES scores. They also found negative correlations between the DES and A and C. The relationships between the DES, N and A remained after removing variance associated with the other variables. In addition, Kwapil et al. hypothesized a positive relationship between DES scores, the O domain and its fantasy facet, but this was not supported.

In summary, research suggests that N is the strongest personality predictor of higher dissociation scores, with negative A also a significant predictor. E and C are reported as negative predictors in some studies, but not all, and there is mixed evidence to suggest that O is also a predictor, with two studies finding a positive relationship between increased dissociation scores and higher O scores (Goldberg, 1999; Ruiz et al., 1999) and two others finding no relationship (Groth-Marnat & Jeffs, 2002; Kwapil et al., 2002).

### 3.3.2 Personality, Trauma, and Dissociation

Some studies indicate that trauma may also influence personality variables or vice versa. There is difficulty in deciphering whether trauma influences personality or whether personality variables influence the experience of trauma. On the one hand, Lauterbach and Vrana (2001) suggest that personality variables are related to the likelihood of experiencing a trauma. They found, in a sample of college students ($N = 402$), that N interacted with trauma intensity in predicting PTSD. Likewise, the findings of another study ($N = 274$ patients with multiple war-related traumas) suggest that the personality dimension of N could be a risk factor for developing posttraumatic
symptomatology (Dimic, Tosevski, & Jankovic, 2004). Conversely, results of other studies found that: (a) early trauma may become ingrained in personality and lead to poor impulse control and interpersonal behaviour ($N = 242$ soldiers) (Rademaker, Vermetten, Geuze, Muilwijk, & Kleber, 2008); and (b) trauma-related personality changes can be seen in adult survivors of prolonged early-life traumas but not in adult survivors of genocide ($N = 31$ Bosnian refugees) (Weine et al., 1998). Another study found that combat-related PTSD is characterised by extremely high $N$ score, and extremely low $A$ score (Talbert, Braswell, Albrecht, Hyer, & Boudewyns, 1993).

Roy (2002) suggests that childhood trauma may be a determinant of $N$. This view is supported by B. Allen and Lauterbach (2007). They found that individuals ($N = 5,877$) who experienced childhood trauma reported elevated levels of neuroticism compared to those who were non-traumatised. Mathews, Kaur, and Stein (2008) also found childhood trauma to be significantly related to most personality traits measured by the NEO-PI-R. Childhood sexual, physical, and emotional abuse were significantly related to $N$; emotional abuse was found to have a strong positive association with $N$, whereas physical and sexual abuse had a weaker negative association with $N$. It was also found that emotional neglect related negatively and sexual abuse related positively to $C$; physical neglect was positively associated but emotional neglect was negatively related to $E$; and emotional neglect and physical abuse were both negatively associated with $A$. No form of childhood trauma related to $O$.

Isaac and Chand (2006) suggest that both trauma and personality attributes may contribute to the aetiology of dissociative disorders. However, there are mixed findings in studies that examine dissociation in relation to trauma and personality. One study suggests that experiences of trauma and higher dissociation scores have a common underlying basis in $N$. That is, dissociation is linked to the tendency to recall and report negative events rather than to the traumatic event itself (R. C. Johnson et al., 1995). Contrary to Johnson et al.’s findings, Irwin (1998) found a significant relationship remained between dissociation and reported victimisation after the contribution of $N$ had been removed. Another study (Ruiz et al., 1999) examined personality, dissociation, and trauma and found that high dissociators who were classified as neurotic/open personality types reported more sexual abuse experiences, and more segment amnestic experiences.
than did other high dissociators who were classified as friendly/extravert and friendly/open. So, it is unclear whether N is the basis for the link between trauma and dissociation, or whether trauma influences N, or whether there are other factors that influence these links. Fantasy proneness is perhaps one such factor. Because there are suggestions that fantasy proneness contributes as much to the development of dissociative disorders as does trauma, the following section examines literature pertaining to fantasy proneness, and then examines links between fantasy proneness and personality, dissociation, and trauma.

3.4 Fantasy Proneness

3.4.1 Defining Fantasy Proneness

Wilson and Barber (1983) define fantasy proneness as a participant’s ability to “set the theme, and then an imaginative scenario unfolds that has some of the characteristics of a dream and some of a motion picture” (p.342). In addition, Giesbrecht and Merckelbach (2006) suggest that fantasy proneness occurs when an individual has an extensive involvement in fantasy and daydreaming, and Levin and Spei (2004) define it as imaginative involvement or absorption.

3.4.2 Early Studies Examining Fantasy Proneness

The early study of fantasy proneness arose out of research examining the imaginative-fantasy abilities of hypnotically suggestible individuals. Wilson and Barber (1981) observed that those who are highly hypnotisable share unique personality traits related to involvement in fantasy. In a sample of 19 “excellent hypnotic subjects” Wilson and Barber noticed a quick and profound response to hypnotic suggestions. These individuals had an extreme involvement in fantasising, and they could not imagine living without the ability to fantasise. In addition, Wilson and Barber found that there were three patterns that encouraged them to fantasise as children: (a) significant adults encouraged some of them to fantasise; (b) some were isolated or lonely; and (c) some fantasised to escape a bad environment.

Wilson and Barber (1981) described characteristics of fantasy-prone individuals. As children they lived in a make-believe world much of the time, not aware of their
natural surroundings. Their stuffed toys and dolls were viewed as alive, they believed in magical beings such as fairies and leprechauns, and spent a large part of their childhood playing with imaginary friends and playmates. As adults, some of them could still effortlessly pretend to be someone else, lose their own identity and become the imagined character. Wilson and Barber (1983) also suggest that possibly 4% of the population are fantasy-prone individuals who “see,” “hear,” “smell,” “touch,” and fully experience what they are fantasising, and that they fantasise a large part of the time. In addition, a later study ($N = 200$) that replicated the Wilson and Barber findings added the following characteristics describing fantasy-prone individuals: they are worried, tense, curious, inquisitive, clever, complex, thoughtful, creative, imaginative, emotional, kind, disorganised, liberal, permissive and unorthodox (Myers & Austrin, 1985). These characteristics seem similar to some aspects of the N and O domains of the NEO personality inventory.

For their original interviews with the fantasisers, Wilson and Barber (1981) constructed a 100-question interview. Subsequently, they developed a 52-item questionnaire called the Inventory of Childhood Memories and Imaginings (ICMI) (Myers, 1983), which asks adults to remember the percentage of time they were imaginative during childhood. Myers reworded the ICMI to make it more useable for children and named the inventory, the Wilson-Barber Inventory of Childhood Memories and Imaginings: Children’s Form (ICMIC). Until recently, research examining fantasy proneness has used the Wilson and Barber/Myers inventories to assess the fantasy construct in relation to a number of issues, for example: the hypnotisability, imagination, and creativity of subjects (Lynn & Rhue, 1986); developmental antecedents (Rhue & Lyn, 1987); psychopathology (Lynn & Rhue, 1988); childhood abuse (Bryant, 1995; Pekala et al., 1999; Rhue et al., 1995); DSM-III-R Axis I psychopathology and dissociation (Rauschenberger & Lynn, 1995); dissociation and DSM-IV Axis II symptomatology (Waldo & Merritt, 2000); and creativity and internal epistemic style (Hill & Clark, 1998).

However, the ICMI is criticised because many of the items appear to tap other constructs, such as schizotypy, childhood abuse, absorption, and dissociativity (Merckelbach, Horselenberg, & Muris, 2001). Merckelbach et al. also found that there
were no published studies detailing the psychometric properties of the ICMI. Therefore, they developed a self-report measure of fantasy proneness, the Creative Experiences Questionnaire (CEQ), which has demonstrated adequate test-retest reliability and internal consistency. The CEQ has been used in the current project (see Appendix A4) to measure the construct of fantasy proneness because the items that overlapped with dissociation in the ICMI have been removed from the CEQ and it is not likely to be measuring the same construct. Numbers of studies have now used the CEQ in research in relation to dissociation and other constructs, as discussed next.

### 3.4.3 Fantasy Proneness and Personality

Few studies have found links between personality domains and fantasy proneness. Sánchez-Bernados and Avia (2004) examined fantasy proneness with the FFM of personality. First, in a factor analysis of the CEQ, they found three factors relating to fantasy proneness: (a) clarity and vividness of fantasies; (b) fantasy as an escape, which they described as more maladaptive than the other two factors; and (c) fantasy as make-believe/suggestibility. Contrary to expectations, they found that all three factors of fantasy proneness were positively related to N and A, but were not related to O except for factor 2, fantasy as escape.

According to Sánchez-Bernados and Avia (2004), the results also suggest that, in adolescents, fantasy proneness is a maladaptive, rather than a positive, aspect of personality. They also point out that N, as outlined above, is often associated with maladjustment, depression, anxiety, and vulnerability to stress in individuals.

Consequently, finding the relationship between N and fantasy proneness was consistent with the connection between fantasy proneness and dissociation, a dimension consistently associated with N (e.g., de Silva & Ward, 1993b; Kwapis et al., 2002; Ruiz et al., 1999). In contrast, McCrae and Costa (1997) suggest that O is related to fantasy and absorption, but is unrelated to N. As a result of these conflicting findings, and the fact that only a limited number of studies have included personality and fantasy proneness, it would be interesting to examine these constructs further.
3.4.4 Fantasy Proneness and Dissociation

A growing number of researchers suggest that there is a strong relationship between dissociation and fantasy proneness. In an undergraduate psychology student sample, Elzinga et al. (2002) ($N = 833$) found that highly dissociative participants were more fantasy prone than low-dissociative participants. Waldo (1998), also using a sample of undergraduate psychology students ($N = 40$, 20 fantasy-prone, and 20 controls), found that individuals who were more fantasy-prone were more likely to produce significantly higher scores on the DES than the controls. They were also more likely to meet the diagnostic criteria for DSM-IV Cluster A personality disorders (Paranoid, Schizoid and Schizotypal) than were controls. In two studies of undergraduate psychology students ($N = 77$, 67 females:10 males; and $N = 51$ females), Merckelbach, Muris, and Rassin (1999) tested the view that dissociation as measured by the DES is related to everyday cognitive failures and/or fantasy proneness. Results showed that fantasy proneness and cognitive failures were independently related to higher dissociation scores.

Merckelbach, Campo, Hardy, and Griesbrecht (2005) also found that higher levels of dissociation were associated with higher levels of fantasy proneness in a clinical sample (schizophrenia, $n = 22$, BPD, $n = 20$, and MDD, $n = 19$), and Muris, Merckelbach, and Peeters (2003) ($N = 331$) replicated a strong connection between fantasy proneness and dissociation in their study of adolescents. However, in all but two of these studies, the sample sizes were small and three were drawn entirely from university student populations.

3.4.5 Fantasy Proneness and Trauma

A relationship has also been found between trauma and fantasy proneness. Greenwald and Harder (1997) found that fantasy proneness was associated with severe childhood physical abuse and punishment, and greater use of fantasy to block the pain of punishment. Rauschenberger and Lynn (1995), found that fantasy proneness was associated with severe psychopathology, which in Chapter 3 was shown to be related to reports of childhood trauma. Bryant (1995) found that those who were younger when sexually abused (prior to age 7 years), reported higher levels of fantasy proneness than
did those who reported being sexually abused after age 7 years. This prompted Bryant to pose a number of possible scenarios: (a) fantasy proneness influences reporting of sexual abuse by memory distortion, (b) trauma plays a causal role in the development of fantasy-based models of coping, and (c) the younger the age of reported abuse, the more likely memories are to be fantasy based. Bryant’s research supports the view that fantasy proneness is utilised by some to block the pain of trauma.

In developing this idea further to illustrate the complex relationships between fantasy proneness, trauma and dissociation, two studies (Pekala, Angelini, & Kumar, 2001; Pekala et al., 1999) suggest that fantasy proneness is as important as child abuse in the development of dissociative disorders. Other literature pertaining to this view is presented in the following section.

### 3.4.6 Fantasy Proneness, Dissociation, and Trauma

As seen above, trauma, fantasy proneness and aspects of personality have been shown to have associations with increased dissociativity. In one view, Elzinga et al. (2002) propose that there are two types of dissociation; one trait-type that is associated with fantasy proneness and a trauma-related type of dissociation seen more within the clinical range. However, some writers suggest that multiple variables are together necessary for the formation of dissociative disorders. Young (1988) states it is likely that “both trauma and fantasy are necessary for the development of the dissociative symptoms seen in multiple personality disorder and that an either/or approach of trauma versus fantasy cannot adequately account for the clinical phenomena seen in patients who dissociate” (p.13). Young proposed that one pathway to the development of MPD uses repressed early childhood fantasies of mastery over trauma that are amalgamated with dissociative defences to bring about the clinical picture of MPD.

Similarly, other research found that dissociative tendencies were strongly linked to fantasy proneness, and, in addition, found that dissociation is linked to trauma reports (Merckelbach, Horselenberg, & Schmidt, 2002). Merckelbach et al. encouraged further research that examines the role of fantasy proneness in the dissociation/trauma process, suggesting the scenario that dissociation and fantasy proneness may contribute to trauma self-reports rather than trauma reports contributing to dissociation. This view supports
the sociocognitive model of dissociation (e.g., Spanos, 1996), which argues that patients who are led to believe that they have been abused may construct fantasies of the abuse that are then experienced as real memories of abuse. Spanos also suggests that a subset of highly imaginative individuals might also enact multiple identities when the occasion calls for it.

Other writers argue that it is fantasy proneness more than trauma that predicts whether an individual is likely to be more dissociative. Cima et al. (2003) question the view that there is a simple and robust causal relationship between childhood trauma and dissociation. Instead they conclude that the link between trauma and dissociation is complex and suggest that dissociation acts as an antecedent of self-reported trauma. Others agree with Cima et al. that the links between trauma and dissociation are not simple and robust as commonly believed, and call for further research to examine the possibility that dissociation encourages self-reported traumatic experiences rather than vice versa (Merckelbach & Muris, 2001), as well as suggesting caution because high DES scores are possibly related to a positive response bias tendency when conducting retrospective studies (Merckelbach, Muris, Horselenberg, & Stougie, 2000).

In addition, Merckelbach and Jelicic (2004) do not discount the dissociation-trauma association but argue that cross sectional reports do not show which precedes the other, trauma or dissociative tendencies. They also propose a scenario in which dissociative tendencies contribute to self-reports of childhood trauma, especially if the self-reports relate to vague trauma items rather than specific trauma items. They conducted two studies ($N = 43$ female psych students, and $N = 127$ university undergraduates respectively) and found that fantasy proneness and responses to broad trauma items, but not responses to factual trauma items, predicted dissociation levels. This pattern of findings suggests that the link between trauma and dissociation is more complex than is often assumed. They claim this overlap between fantasy proneness, dissociativity, and endorsed trauma items is substantial. Merckelbach and Jelicic also suggest other variables such as N may be relevant in this model and warrants further investigation.

Yet others suggest perhaps that fantasy proneness mediates the link between trauma and dissociativity. While Geraerts et al. (2006) found a considerable overlap
between dissociative symptoms and fantasy proneness, and a link between fantasy proneness, self-reported trauma and dissociation, they argue that, apart from trauma, fantasy proneness contributes to dissociation, and that childhood traumatic events might foster fantasy proneness. However, Geraerts et al. also state they found “no support for the idea that dissociative symptoms can be fully accounted for by fantasy proneness” (p.1144).

Another study found that high dissociation scores were associated with high fantasy proneness scores, but did not find that a basis of fantasy proneness accounted for more commission errors made in emotional recall by high dissociators compared to low dissociators (Candel, Merckelbach, & Kuijpers, 2003). Furthermore, a study by Näring and Nijenhuis (2005) in relation to dissociation and fantasy proneness found differing results for different types of dissociation – psychoform dissociation and somatoform dissociation. While finding significant correlations between reported potentially traumatising events and dissociation, after partialling out fantasising, the link between psychoform dissociation and reported potentially traumatising events diminished substantially (but remained significant in the student sample). In contrast, the relationship between somatoform dissociation and reported potentially traumatising events remained significant in both samples, though diminished slightly.

Therefore, it seems the relationships between personality, trauma, fantasy proneness and dissociation are not clear-cut. The current project aims to investigate these relationships and also questions whether these constructs are the only major contributors to the trauma/pathological dissociation/fantasy proneness/personality mix. As suggested (above) the model is a complex one. A priori, the concept of resilience seems to have the potential to add to our understanding of pathways to pathological dissociation.

### 3.5 Resilience

In psychopathology research generally, there is growing interest in the concept of resilience as a complement to the vulnerability focus of variables like N. Many people face potentially overwhelming trauma in their early years yet appear to go on and
manage their adult lives with a considerable degree of competency. What is it that helps some people not only survive, but even thrive in spite of their adversities?

### 3.5.1 Defining Resilience

There are varied definitions of resilience, but each one contains two central themes: (a) one of risk or adversity; and (b) the other of positive adaptation or competence (Luthar & Cushing, 1999). Not everyone agrees on what constitutes resilience, but Windle (1999, p.163) states that “…the most agreed upon definition of resilience is the ‘successful’ adaptation to life tasks in the face of social disadvantage or highly adverse conditions”, and the definition that seems to be most used in research is that of Masten, Best, and Garmezy (1990). They suggest that “Resilience refers to the process of, capacity for, or outcome of, successful adaptation despite challenging or threatening circumstances” (p.426). Wagnild and Young (1993) also incorporate the idea of flexibility and the ability to respond to environmental forces for their definition of resilience. They see resilience as emotional stamina, which describes those who show courage and adaptability in the face of negative life events. There are also other nuances of meaning for the definition of resilience, such as being able to sustain competent functioning in the face of severely challenging circumstances, effective coping, and recovery from acute, prolonged or severe adversity (Masten et al., 1990). Egeland (2007) maintains that resilience is an ongoing process of gathering resources that enable the individual to negotiate their current environment adaptively.

Studies on the maltreatment of children have demonstrated this ability to recover. It is suggested that the more severe the trauma or maltreatment, the less likelihood of recovery, especially if the child is older (Masten et al., 1990), or has little family support (Terr, 1983). However, Bonanno (2004) contends that resilience and recovery are not the same thing. He suggests that recovery means a temporary loss of normal functioning that gives way to threshold or subthreshold psychopathology for a period of time and then gradually returns to pre-event levels. Resilience, on the other hand, implies the ability to maintain a stable equilibrium due to the presence of protective factors that foster positive outcomes and healthy personality characteristics. There is a view that defining resilience may be a difficult task because it might not be a unitary construct, but a network of
related processes that should be identified and studied as discrete constructs (Kumpfer, 1999). Other research suggests that the resilience construct is not entirely independent of personality factors and suggest that the resilience factors should be seen as variants of personality factors not accounted for by the Big Five Model (Friborg, Barlaug, Martinussen, Rosenvinge, & Hjemdal, 2005).

### 3.5.2 Predictors of Resilience

A number of researchers have proposed influences that make a person more resilient to stress (e.g., Bonanno & Mancini, 2008; Egeland, 2007; Glantz & Sloboda, 1999; Gore & Eckenrode, 1994; Rutter, 2006). Models of stress and resilience include protective factors that are said to reduce the outcome of dysfunction and disorder when stressful life events are experienced in the presence of vulnerabilities. The positive influences function as protective factors and predispose an individual to be more resilient (Gore & Eckenrode).

However, while there are positive influences that act as protective factors and predispose individuals to be more resilient, there are also negative influences that are risk factors. The positive and negative influences can both be of two types: personal/individual characteristics; and environmental influences. Positive personal/individual characteristics are thought to be such things as physical health status, self-esteem, mastery beliefs, intelligence, high scholastic achievements, social skills, an easy disposition, a positive social interaction style (e.g., having a sense of humour), a flexible adaptive approach to new situations (Gore & Eckenrode, 1994). Others include having a positive outlook on life; having a vision and a sense of mission; accepting responsibility and taking risks; being creative; being able to monitor and regulate emotions; and having insight and being perceptive (Parr, Montgomery, & DeBell, 1998). Negative individual characteristics are such things as neurological disorders, poor emotional regulation and expressiveness, aggression and difficulty controlling impulses and behaviour, social incompetence, impaired/limited social relationships, antisocial personality/behaviours, and other psychiatric dysfunctions and difficulties (Glantz & Sloboda, 1999).

In addition, positive environmental influences/resources are such things as family income, strong and secure attachments to caregivers, involvement with good
schools and pro-social institutions, and a community of social support (Gore & Eckenrode, 1994). Negative environmental influences can be such things as poverty, severe parental and family dysfunction, and severe traumatic life events (e.g., child maltreatment) (Bonanno & Mancini, 2008; Glantz & Sloboda, 1999; Gore & Eckenrode, 1994; Rutter, 2006; Vanderbilt-Adriance & Shaw, 2008).

While acknowledging all the above, however, Glantz and Sloboda (1999) concluded that there is no single quality, or circumstance, or universal factor of resilience that is of benefit in all, or even most, situations. In fact, they say what works in one situation may not work, or may even be counterproductive, in another situation. An index of resilience would only address some of the conceptual problems to do with the construct. Eisold (2005) also argues that these lists of protective factors are not sufficient to explain what makes an individual resilient or to explain how resilient children maintain hope. These observations support Kumpfer’s (1999) statement that resilience is an elusive construct.

3.5.3 Researching Resilience

Much of the early research on resilience was conducted on child samples (Luthar & Cushing, 1999). Cross-sectional studies examining resilience in children/adolescents tend to find less favourable outcomes for the less resilient child and fail to make definitive conclusions regarding causal relationships between stressors and outcomes (Luthar & Zigler, 1991), but for longitudinal studies, the at-risk children often end up being resilient along with their less at-risk cohorts (e.g., Werner, 1993).

A longitudinal study to examine resilience in a child population began in Hawaii in 1955 (Werner, 1993). The Kauai Longitudinal Study is a prospective study of 698 multiracial babies born on the island, continuing into their adult lives (Werner, 2004). The study first examined the children’s vulnerability to serious risk factors such as perinatal stress, poverty, parental psychopathology, and disruption of their family unit (Werner, 1993). About one-third of the cohort was designated as high-risk. The remaining two-thirds were considered to have had a normal birth and upbringing and were not at risk.
Findings showed that, at age 32, one-third of the high-risk children had grown into competent, confident and caring young adults. These were the resilient youngsters (Werner, 1993). Again at age 40 years, Werner (2004) reported that most of the high-risk participants had recovered from the risk-effects of their early years, with poorest outcomes being associated with prolonged exposure to parental alcoholism and/or mental illness. Results of another study, the Minnesota Risk Research Project (Garmezy, Masten, & Tellegen, 1984), are also supported by Werner’s findings, that high-risk children do not necessarily become maladaptive adults, but generally grow up to be warm and competent people.

Other researchers have studied high-risk adolescents in cross sectional research (e.g., A. J. Hunter & Chandler, 1999; Luthar, 1991; Rew, Taylor-Seehafer, Thomas, & Yockey, 2001). Luthar’s (1991) aim was to explore variables that allow children to remain competent in spite of experiencing stressful life circumstances. He found that, when facing high stress, an internal locus of control was a protective factor amongst 144 adolescents, while higher intelligence (IQ) and an external locus of control were vulnerabilities. Another interesting finding was that competent youth from high stress backgrounds were significantly more depressed and anxious than were competent youngsters from low-stress backgrounds. The finding that higher intelligence was a vulnerability is also surprising, as other literature suggests higher intelligence is a protective factor (e.g., Garmezy et al., 1984; Glantz & Sloboda, 1999; Rutter, 2006). Luthar proposes this is because children with higher intelligence tend to have greater sensitivity to their environments, which, if highly stressful, can pose a risk.

Egeland (2007) also found child IQ is not necessarily a protective factor for boys or girls. The most important protective factor for the competent but high-stressed sample was either a secure mother-infant attachment or an alternative supportive caregiver. This enables a child to develop resilience in the face of an adverse environment. Egeland also maintains that one necessary variable for developing resilience is the child’s ability to engage the social environment by trusting others.

In contrast, Hunter and Chandler (1999) found that adolescents rated themselves resilient despite their traumatic and stressful circumstances, but they reported understanding resilience to mean being disconnected, isolated, and insulated in order to
survive. This was because the 51 adolescents they interviewed reported that being resilient meant being disconnected from those they cannot trust, isolated from support systems, and insulated in order to cope with emotional pain. Hunter and Chandler wondered if resilience in adolescence is not necessarily a healthy state, and if both resilient and vulnerable adolescents need similar interventions. Other research with homeless adolescents found that lack of resilience was significantly related to hopelessness, loneliness, life-threatening behaviours, and connectedness, but not to gender or sexual orientation (Rew et al., 2001).

3.5.4 Measurement of Resilience

According to Friborg et al. (2005), the majority of published articles on resilience have appeared since 1995, and yet, in spite of the increasing interest in the subject, there is still a dearth of measures for studying resilience. In addition, Kaplan (1999) argues that the assessment of resiliency depends very much on what outcome measures are tested, for example, an individual may be classified as resilient when measured for academic achievement but not when assessed by other criteria such as family or peer relations. Another problem is that up to 1999, most resilience research was based on work with children, and the measures used are usually scales of negative life events, which are associated with many methodological problems (Luthar & Cushing, 1999).

A number of researchers have endeavoured to develop measures to assess the construct of resilience, for example, the 25-item Connor-Davidson Resilience Scale (CD-RISC) (Connor & Davidson, 2003); the 25-item Resilience Scale (RS) (Wagnild & Young, 1993); the 37-item Resilience Scale for Adults (RSA) (Hjemdal, Friborg, Stiles, Rosenvinge, & Martinussen, 2006); the 21-item Adolescent Resiliency Scale (Oshio, Nakaya, Kaneko, & Nagamine, 2002, cited in Oshio, Kaneko, Nagamine, & Nakaya, 2003); and the Swedish language version of the RS (Nygren, Bjorkman Randstrom, Lejonklou, & Lundman, 2004).

Ahern, Kiehl, Sole, and Byers (2006) conducted a review of six instruments used to measure resilience in adolescents and concluded that, of the six, the Resilience Scale
(RS) (Wagnild & Young, 1993) had the best psychometric properties. Consequently, the RS was used in the current project to measure resilience (see Appendix A5).

### 3.5.5 The Resilience Scale

The RS was initially developed from the narratives of 24 women who had adapted well after experiencing a major life event (Wagnild & Young, 1990). A grounded theory approach was used and five components were identified: (a) **Equanimity**: a balanced perspective of life and experiences, the ability to “hang loose” and take what comes, being able to moderate extreme responses to adversity; (b) **Perseverance**: the act of persistence in spite of adversity; (c) **Self-reliance**: “a belief in oneself and one’s capabilities” – self-dependence and recognising personal strengths and limitations; (d) **Meaningfulness**: realising life has a purpose and that one has something to contribute; and (e) **Existentialaloneness**: sense of freedom, sense of uniqueness for each person’s life-path, a realisation that some experiences are shared and others are faced alone. In a factor analysis from a random community sample of 810 older adults, a two-factor solution was the best fit and was interpretable (Wagnild & Young, 1993). Factor 1 (17 items) suggested self-reliance, independence, determination, invincibility, mastery, resourcefulness, and perseverance, and was labelled personal Competence. Factor 2 (8 items) was labelled Acceptance of Self and Life, and represented adaptability, balance, flexibility, and a balanced perspective of life.

In the following sections are several studies that have examined resilience in relation to a number of variables. Some studies used the RS (e.g., Humphreys, 2003; Nygren et al., 2004; Rew et al., 2001a; Schumacher, Leppert, Gunzelmann, Strauß, & Brähler, 2005), others used scales such as the Connor-Davidson Resilience Scale (CD-RISC) (e.g., Campbell-Sills, Cohan, & Stein, 2006; Connor & Davidson, 2003; Davidson et al., 2005).

### 3.5.6 Relationship between Resilience and Other Constructs

Many studies suggest resilience predicts better quality of life and better mental health (e.g., Hjemdal et al., 2006; Ong, Edwards, & Bergeman, 2006), but of interest to
the current project is evidence linking resilience with personality, childhood trauma, fantasy proneness, and dissociation.

3.5.6.1. Resilience and personality.

Studies have found that resilience is negatively related to N, and positively related to E and C (Campbell-Sills et al., 2006; Nakaya, Oshio, & Kaneko, 2006). Nakaya et al. also found resilience correlated positively with O and that N accounted for a large proportion of the variance in resilience scores (35%). In a study using a related construct, hardness was found to correlate positively with assertiveness, emotional stability, extraversion, openness to experience, agreeableness, and conscientiousness, but correlated negatively with depression, anxiety, perceived stress, and external controls of chance and powerful others (Ghorbani & Watson, 2005). In the light of these studies it is to be expected that resilience would be negatively correlated with N, and positively related to E and C.

Schembri and Reece (2007) investigated the psychosocial resources associated with resilience in an early adulthood sample (18-25 years). Resilience was calculated using scores on two measures: stress, and health and wellness. Those who rated themselves high in both stress and health and wellbeing were classified as resilient. Schembri and Reece found that those who were resilient reported heightened levels of optimism, more positive emotions, and greater social support from family and friends when compared with their lower resilience counterparts. In addition, those who were more resilient demonstrated significantly higher internal locus of control indicating that they are perhaps more self motivated and independent in their thinking than less resilient individuals, and are therefore more likely to perceive they have the capacity to exert some control over their external environment. Therefore, both psychological and social variables were associated with resilience in early adulthood.

3.5.6.2. Resilience and trauma.

A number of papers have examined the existence of resilience in the face of trauma (e.g., Adams, 2005; Bonanno, 2004; Bonanno & Mancini, 2008; Cicchetti, Rogosch, Lynch, & Holt, 1993; Valentine & Feinauer, 1993). For example, Valentine and Feinauer reported that many adults who were sexually abused as children have led
successful lives in adulthood. In a qualitative study, they questioned a sample of 57 adult women who had been sexually abused as children. The goal was to explore types of experiences that sexual abuse survivors see as helpful in assisting them to overcome the trauma of their early abuse. The prevalent resilience themes taken from the interview data were: (a) the ability to find emotional support outside the family; (b) self-regard or the ability to think well of oneself; (c) religion or spirituality; (d) external attributions for blame and cognitive style; and (e) an inner directed locus of control emanating from internal values rather than directions and expectations of others. These findings for those who are more resilient are consistent with later research (Egeland, 2007; Schembri & Reece, 2007).

Humphreys (2003) examined resilience in a convenience sample of 50 battered women who sought shelter in a women’s refuge. Resilience was measured using the Resilience Scale (Wagnild & Young, 1993). Results showed that these women reported high levels of resilience and significantly less physical and psychological distress. Humphreys thought that this was because these women had to display high levels of resilience in order to survive the abuse and then safely find their way to a battered women’s shelter. Finkelhor (1990) also presented data that suggested there were a substantial number of sexual abuse victims who reported no adverse symptomatology. In some samples studied, up to 30% of victims reported no symptoms (Runyon, 1988; Cohen, 1986; Tong et al., 1987, cited in Finkelhor, 1990), suggesting they had a way of coping with the trauma – they were resilient.

It seems that both resilience and negative effects of trauma can co-exist. Banyard, Williams, Siegel, and West (2002) found that female survivors of childhood sexual abuse, despite negative outcomes such as mental health problems, could still be very resilient. This idea of trauma and resilience co-existing is supported by Daigneault (2005) who found similar results amongst sexually abused adolescents. The adolescents showed areas of both trauma and resilience, for example, in the area of memory they were able to give a relatively complete life story, but had difficulty linking affect with past events and they often had little or no meaning for past events. They also had difficulty assigning realistic meaning to the trauma or to the self.
3.5.6.3. Resilience and dissociation.

There are scant studies that have examined dissociation in relation to resilience. Two single-case studies (Burton, 2004; Eisold, 2005) have delved into the lives of two women who experienced childhood sexual abuse and dissociation, and yet exhibited resilience as adults, but these papers give little insight into what the relationship between the two constructs might be. Eid and Morgan (2006) examined the relationship between peritraumatic dissociation, the related construct hardiness, and military performance in Norwegian Navy officer cadets using the “challenge” subscale of a hardiness measure. Challenge, is the ability to anticipate change as an exciting challenge to further development (Kobasa, 1979) and is similar in some aspects to the definition of resilience (see Masten et al., 1990; Wagnild & Young, 1993). Eid and Morgan found that peritraumatic dissociation was negatively associated with military performance scores, and negatively associated with challenge, the hardiness subscale.

There is no indication of what effect resilience would have on dissociation scores apart from the fact that, as mentioned earlier, dissociation is positively correlated with N. This would perhaps suggest that resilience would also have a negative relationship with dissociation.

3.6 Summary of Chapter 3

This chapter has examined literature relating to factors other than childhood trauma that might predict dissociativity. Literature pertaining to personality and dissociation suggests that those who are more neurotic and who are less agreeable are more dissociative. Furthermore, some literature suggests that those who are more fantasy-prone might be more neurotic. There is also evidence that trauma increases fantasy proneness, which in turn is associated with an increase in dissociativity. Research also suggests a possible mediating role for fantasy proneness between childhood trauma and dissociation. A limited range of studies suggest a negative relationship between N and resilience, but no published research to date has examined the relationship between resilience and dissociation.

After examining literature pertaining to the possible aetiology of dissociation, it seems clear that aetiological models are more complex than implied by either
traumagenic models or sociocognitive models. A key feature of these models is that they either recognise trauma or the individual difference variables considered important in the sociocognitive models. The second aim of the current project is to attempt to bring together these major competing explanations of dissociation and break the tradition of polarisation by producing a model that integrates all the variables in order to examine how these factors might relate in the development of dissociation.

The following chapter introduces the need for further qualitative research to examine the phenomenology of dissociation.
CHAPTER FOUR: THE PHENOMENOLOGY OF DISSOCIATION

Remarkably little literature has attended to the question of what the process of dissociation is like amongst people for whom it is a marked or pathological feature. There were two phenomenological studies examining aspects of normal dissociation (Collins, 2004a; Edge, 2004), and only four published and two unpublished studies examining aspects of pathological dissociation using various qualitative methods (Beere, 1996a, 1996b; Casey, 1998; Legris, 1995; Machell, 1999; Stewart, 1991) highlighting a lacuna in the literature. This deficit in the literature has two consequences: (a) it leaves the person out of the story and focuses only on their symptoms or psychopathology; and (b) it means that a valuable resource for understanding dissociative disorders is untapped, that is, there is no access to the information from the perspective of the participant.

4.1 Non-pathological Dissociation

Phenomenological studies relating to normal dissociation are rare (Collins, 2004b; Edge, 2004). Having information from non-clinical samples could juxtapose information from clinical samples, and assist in understanding differences between pathological and nonpathological dissociation.

One study investigated whether both high and low dissociators in a non-clinical population would experience dissociative phenomena under highly arousing and uncontrollable conditions, such as riding a roller coaster (Collins, 2004b). The sample consisted of 12 low- and 25 high-dissociators. The majority (90%) of the sample experienced one or more dissociative phenomena during the ride. These phenomena fell into the categories of derealisation, depersonalisation and time distortions, and were experienced by high and low dissociators alike. Almost 50% of the sample reported derealisation experiences, such as, dream-like or surreal states, sensory loss (vision and hearing), narrowed focus or attention, and a sense of being in one’s own world. A small percentage (13%) reported depersonalisation experiences, such as feeling like they were not in their own body, not being able to feel parts of their bodies, or feeling like their body was not normal. The most common dissociative experience reported was of time
distortion (70%) with time speeding up, time standing still, or time slowing down. Collins concluded that events precipitating ‘peritraumatic’ dissociative reactions need not be negative or traumatic. Her findings suggest that highly arousing and uncontrollable conditions are sufficient to produce peritraumatic dissociative responses even though the conditions are experienced as positive. These findings that place derealisation and depersonalisation experiences within the normal range of dissociative experiences are in contrast to the literature that views depersonalisation and derealisation as part of pathological dissociation (see Chapter 1, section 1.13.1).

Edge (2004) studied nonpathological dissociation by investigating what she termed “directed dissociation” (p.159). She differentiates directed dissociation from both pathological and purposeful dissociation. Edge (2004) classifies pathological dissociation as rigid compartmentalisation of parts of the self such that the parts are inaccessible to awareness. Alternatively, purposeful dissociation is classified as experiences that arise out of techniques used to take awareness beyond the mind-body unit through such activities as prayer, meditation, marathon running, and breathing exercises. Physical boundaries become indistinct, sense of time is lost, and mundane activities of life are transcended, thus inducing a peaceful and creative state. In contrast, Edge asserts that the state of directed dissociation is more deliberately produced than purposeful dissociation and enables the individual “to navigate in, explore, or be in relationship with specific constituents of Consciousness used” (p.159). It is accessed in a similar way as purposeful dissociation but the experience has a much more interactive quality.

In her study, Edge (2004) interviewed four males and four females (M = 44 years) who met two criteria for inclusion: (a) the ability to produce states of directed dissociation intentionally and repeatedly; and (b) the ability to integrate the dissociative experiences so that they had meaning and did not impair healthy functioning. Using a phenomenological method, Edge (2004) found that these individuals were able to access at will this dissociative state, which appears to resemble an out-of-body experience or trance-like state. They were also able to direct the experience to a desired outcome once it was accessed. Then they were able to guide themselves back to their bodies using intent. Themes that emerged were: (a) the necessary conditions to access the directed
dissociation state; (b) the components of consciousness; (c) the mechanics of directed dissociation, that is, creating it, navigating it, and terminating it; (d) experiences along the spectrum; (e) integration of the experiences into a healthy concept; and (f) the life-enhancing potential, for example, a sense of purpose, and sense of identity. Some participants indicated that early in their lives these states were more like pathological dissociation, but that in later years there was a sense of enrichment gained through actively and intentionally accessing these dissociative states. It appears these individuals experienced high levels of dissociation but did not report it as pathological. Rather, they used it for self-enhancement.

4.2 Pathological Dissociation

Four published qualitative studies have examined various particular aspects of pathological dissociation. The first focused on non-suicidal self-harming tendencies of women diagnosed with MPD (Robinson & Valle, 1998). Eleven females answered one written question asking them to recall an experience of self-cutting and describe in detail how they felt. Thirty two components of the act of self-cutting were identified, including altered states of consciousness, memories of trauma and rituals, triggers, pre-cutting and post-cutting emotional responses, and the compulsive quality of self-cutting. Robinson and Valle also identified two types of reported prior abuse (ritual abuse, and non-ritual abuse) and there were significant differences between the self-cutting accounts of those who reported each type. The accounts of self-cutting given by those who reported experiencing ritual abuse (n = 7) were more complex than those who reported non-ritual abuse in a number of areas: in relation to personal experience; memory storage processing; internal coping mechanisms; depth of fear structures; and degree of the development of masking emotions. As mentioned in Chapter 2, more severe adult psychopathology is reportedly associated with more severe and prolonged childhood abuse (e.g., Browne & Finkelhor, 1986; Chu, 1998; Fraser, 1997; van der Hart et al., 1997; Young & Young, 1997), and the Robinson and Valle study adds to this body of knowledge.

Beere (1996a) investigated externally precipitated switching between alters in individuals with DID using experimental phenomenological analytic methods advocated
by Giorgi (1975). The answers of seven of the 16 female participants were analysed and Beere concluded that strong affect, or defence against intolerably negative states was not the primary reason for switching between alters. Beere suggests it is more a battle for control between alters in which one alter loses control to a second alter. He also postulates that “Alters respond to future possibilities and the meanings or implications of events, not simply to strong affect” (p.58), and that “[a]lters battle for control, evenly matched, and take over and lose control in rapid succession” (p.58). These findings are contrary to Braun’s (1984) state dependent learning theory that suggests switches are triggered by certain state dependent internal or external triggers.

Beere (1996b) discussed the theoretical implications of his findings (see Beere, 1996a), and observed that the participants had demonstrated the gamut of switch phenomena described in the clinical literature. Switching was both “controlled and uncontrolled, environmentally and internally elicited, amnestic and co-conscious, appearing in unusual situations, disappearing unpredictably, and alters overlapping, blending and interfering” (p.61). He concluded that switching was not always triggered by fear, pain or stress, but that intensity of state was a more salient or necessary precondition for this type of switching. Beere also states that the switches described in the data mostly involved anticipating unfolding situations that would have significance to the alter taking over control, thus “[t]his complex, future-oriented involvement does not match the stimulus-response paradigm underlying ‘triggers’” (p.62). It is unclear from Beere’s results whether other types of switching, for example, internally precipitated switching, would be dependent on intensity of state or whether other factors such as fear, pain or stress could trigger them.

A third study examined individuals with DID who have experienced some measure of healing through therapy (Casey, 1998). Casey conducted a phenomenological study focusing on post treatment and post-unification of alters after which no alters or personality fragments could be elicited (integration). Eight female participants reported that the post-unification state presented difficulties in work, relationships, personal identity, memory, and spirituality. They also reported a lack of support networks, either professional or social. Despite these challenges, none of the participants preferred to return to their fragmented states prior to unification. Another
interesting finding was that none of the women considered DID to be a mental illness. Casey suggested that a medical framework may not be the most suitable for capturing the experience of those with DID. Clayton (2004, 2005) also gives credence to the idea that DID is not a mental illness. She questions the classifying of dissociative identity as a disorder. She maintains that some individuals who experience themselves as multiple view it as an adaptive, rather than maladaptive, way of living.

The fourth published study (Machell, 1999) was a phenomenological exploration of the inner worlds of individuals diagnosed with complex dissociative disorders using unstructured dialogic interviews with five participants. All were in treatment for a dissociative disorder. Machell found that participants’ inner worlds had similarities of both function and structure. Similarities of structure included the inner world’s ability to change, detailed mapping, the presence of human inhabitants not identified as alters, the inner world’s existence prior to the alters, and changes during treatment. Similarities of function included escape from abuse, habitation for alters, self-soothing, memory storage, and a place to accomplish therapeutic tasks.

In contrast to the above studies, two unpublished dissertations explored the phenomenological experience of pathological dissociation more broadly (Legris, 1995; Stewart, 1991). Stewart’s sample consisted of 10 women all with a DSM III-R diagnosis of either MPD or DDNOS. They all completed an interview containing one open-ended question and four follow-up questions that explored the participants’ subjective view of dissociation. Eight predominant themes emerged from the data and included: (a) dissociation as normal; (b) dissociation for safety; (c) different types of dissociation; (d) certain affects and certain sensory stimuli trigger dissociative experiences (different from Beere’s, 1996a, findings); (e) changes in reality during dissociation, which included changes in sense of time, perspective dimension, and sensory perception; (f) feelings of isolation related to craziness/believability issues and secrecy issues; (g) problems with mirrors; and (h) adaptive and negative aspects of dissociation.

Stewart (1991) discussed the dissociation definition and continuum debates and suggested that the confusion over the definition may arise out of the fact that dissociation is a very broad phenomenon. All of her participants experienced changes in reality in terms of perceptual sensory input, but apart from that commonality, they all
spoke of differing dissociative experiences. Stewart suggested that individual differences in perceptual experiences appeared to be related to amount of abuse experienced, with more isolated abuse events producing a less extreme type of dissociation, and continual abuse producing the more extreme perceptual processing associated with MPD. Thus, she claims, the less extreme abuse at one end of the dissociative continuum results in PTSD symptoms, and the more extreme abuse at the other end of the continuum results in MPD. These observations concur with those who suggest that more severe childhood abuse is associated with more severe dissociative symptoms. In addition, Stewart concluded that the terminology and theory at the time of writing focused too much on the disorder without giving credence to the adaptability of dissociation. She suggests focusing on the human ability to change perceptions in order to survive, and that theory should be oriented more towards human potential rather than towards human pathology. These thoughts are similar to those expressed by Clayton (2004, 2005) and Casey (1998) above.

Like Stewart (1991), Legris (1995) conducted a broader study examining the lived experience of pathological dissociation. She selected five women from a dissociative disorders program who had experienced extreme levels of dissociation that characterise DID. Using a phenomenological methodology of analysis, Legris found eleven prominent shared themes: experiences of severe trauma; recognition of something being wrong; escape from pain; disturbances in time; experiencing isolation; cooperation between alter personalities; the importance of healing; the roles of alter personalities; experiences of fear; suicidal experiences; and a desire for understanding and acceptance. There were eight further themes not common to all: hearing voices; being a high achiever; difficulty in being properly diagnosed; physical symptoms associated with DID; looking for control; feelings of anger; feelings of shame; and feeling worthless.

Three higher order themes also emerged from the Legris (1995) data: (a) a sense of “cooperation” between the alters seen as a desirable goal for healing; (b) “meta-cognition”, that is, high levels of perception and awareness necessary to maintain a complex defensive safety structure, with varying levels of awareness at different times; and (c) a pervasive sense of “protection”, wherein dissociation continued to be used as a
form of defence and as a form of protection for the self. Legris asserts that this sense of protection is the essence of dissociation. However, Legris and Stewart only interviewed individuals high in dissociation that had a diagnosis of DID or DDNOS.

While there are similarities across the latter three studies, each one presents different aspects or challenges for an individual diagnosed with a severe dissociative disorder. Similar themes were: abuse; dissociation used for protection or safety of the self; changes in perception and awareness; and feelings of isolation. There were also opposite themes: a recognition that something was wrong (Legris, 1995), and seeing dissociation as normal (Stewart, 1991), which suggests some individuals view their experience as normal and others do not.

While two of these six studies examined the phenomenology of dissociation as a whole, the others all narrowed focus to one or two aspects of the dissociative experience. All participants in the six studies were diagnosed with DID or DDNOS and most reported experiencing abuse. In addition, none of the above studies has examined the differences of those who are highly dissociative but do not have diagnosed DID. the present project addressed this deficit in the literature.

4.3 Research Questions

In order to conduct a phenomenological study examining the lived experience of dissociation for those who are highly dissociative, a number of research questions were generated from the literature about dissociative disorders. The first set of research questions were formulated to elicit if there are different types of dissociation and to find out what happens during an episode of dissociation. The second series of questions were designed to explore the past history of the individuals’ dissociative experiences, to remember what it was first like when they realised they were dissociative, and to discuss the sense they make of why they dissociate. The third question grouping was designed to explore present time experiences about what they are doing, feeling, thinking, and experiencing when they dissociate. A further research question related to how dissociation helps or hinders in everyday life, and the last set of questions was concerned with experiences in therapy and what their dissociative experiences were like before and after they began therapy. This last research question emanated from the debate about the
aetiology of the dissociative disorders. The Sociocognitive model suggests that therapists model DID to their clients who then learn to enact the alters (Spanos, 1996), so this last research question was designed to elicit information about whether DID is perhaps a learned response through therapy.

The following Chapter 5 summarises the key points of the current project and presents the overall aims before presenting the three studies addressing the aims.
CHAPTER 5: THREE-STUDY DESIGN OF THE CURRENT PROJECT

The overarching aim of the current project was to advance understanding of dissociation. This aim was achieved by addressing three specific objectives. First, a study was conducted to investigate the dissociation construct itself, in particular the proposed existence of a dissociative taxon (see Study 1, Chapter 6). Study 1 was a self-report, cross-sectional study designed to provide a test of the hypothesis that a dissociative taxon exists. However, if dissociation is a continuous construct there is a need to understand that individuals with a DSM-IV Dissociative Disorder diagnosis vary by degrees along a continuum rather than differing qualitatively from “normals”. There are also theoretical implications in that, if phenotypic dissociation is continuous, it is likely to arise from multiple causal influences rather than a single present/absent causal factor that determines category membership (Meehl, 1992). Taxometric procedures were the method used to investigate this first aim.

The second objective was to test a series of putative predictors of dissociation (see Study 2, Chapter 7). It points to a more complex description of dissociation, including its continuous nature, a blurring of the distinction between normal and pathological dissociation, and recognition of multiple causal pathways. Study 2 was also a self-report, cross-sectional, retrospective study that investigates dissociation as an outcome of childhood trauma, adult personality, resilience, and fantasy proneness. Dissociation was viewed in two ways, first as a continuous measure and second, as categorical. If there is a distinct dissociative taxon that is different qualitatively from normals, then the predictors may differ markedly from those shown for dissociation as a continuous dimension. Therefore, this study aimed to explore this difference. A further aim was to explore age differences in reporting dissociative experiences in relation to the independent variables of childhood trauma, personality, fantasy proneness and resilience. Two age groups were determined, 17 to 22 years and 23 to 70 years, based on research that suggests that dissociative experiences decline with age after young adulthood (Ross et al., 1989d). These objectives were tested using multiple regression analyses and structural equation modelling.
The final objective was to collect evidence on the phenomenology of dissociation (see Study 3, Chapter 8). Tensions in the literature point to one central question: what is the essential nature of dissociation, especially its pathological aspect? To complement the quantitative approaches of studies 1 and 2, the researcher sought to advance understanding of this issue by going to the source. Using a phenomenological method (Interpretative Phenomenological Analysis [IPA]), a purposive sample of participants were asked about their lived experiences of dissociation.
CHAPTER 6

STUDY 1. DISSOCIATIVE EXPERIENCES SCALE: IS DISSOCIATION CONTINUOUS OR CATEGORICAL?

6.1 Aims of Study 1

As outlined in Chapter 1, the Dissociative Experiences Scale (DES) (E. M. Bernstein & Putnam, 1986; Carlson & Putnam, 1993) assumes dissociation to be a continuous construct ranging from low levels of dissociativity through to a pathological extreme. However, this assumption has been disputed (N. G. Waller et al., 1996) and findings suggest there are aspects of dissociation that can be better conceptualised as categorical, or taxonic, rather than dimensional. Carlson and Putnam suggest that some items of the DES are markers of nonpathological dissociation, such as absorption and imaginative involvement, which measure a dimensional construct. They suggest that other items are markers of a qualitatively distinct pathological dissociation, such as identity alteration, amnesia for dissociative states, and depersonalisation/derealisation.

The first aim of the current project was to re-investigate the measurement of dissociation using the DES, and to replicate the findings of N. G. Waller et al. (1996), N. G. Waller and Ross (1997), and Waelde et al. (2005). Each of these studies suggests there is a pathological dissociative taxon that distinguishes those with more severe forms of dissociation from “normal dissociators.”

The specific aims of Study 1 were: (a) to re-examine the psychometric properties of the DES using exploratory factor analysis prior to; (b) replicating the findings of Waller et al.’s (1996) research that tested for the presence of a dissociative taxon that exists apart from normal dissociation; and (c) testing an alternative set of amnesic items from the DES as potential indicators of a taxon, focusing exclusively on amnesic phenomena. As shown in Chapter 1, some researchers question the validity of the current DES-T as a measure of the likelihood of belonging to a taxon of pathological dissociation (e.g., Goodman et al., 2003; Leavitt, 1999; D. Watson, 2003), and others argue that amnesia is the feature that characterises the vast majority of clinically diagnosed dissociative disorder cases (Cardeña et al., 1996). It is also argued that the
criteria of depersonalisation and derealisation may decrease sensitivity without gains in specificity (Cardeña, 2001; Gleaves et al., 2001).

It was expected that a pathological dissociative taxon would be identified using the existing eight-item DES-T (N. G. Waller et al., 1996; N. G. Waller & Ross, 1997). In addition, a research aim was to test nine amnesic items in the DES scale to investigate whether they might also identify a pathological dissociative taxon (as discussed in Chapter 1, section 1.13.1).

6.2 Method

6.2.1 Participants

For taxometric procedures, the recommended sample size is 300-600 participants, and it is necessary to ensure there are at least 30 taxon members in the sample to facilitate identifying a taxon if one exists (J. Ruscio et al., 2006; Schmidt et al., 2004). In fact, Schmidt et al. argue that for accurate estimation of parameters of the taxon, many more taxon members than 30 are required, but not as many as 50% of the sample because this latter strategy can produce spurious evidence of taxonicity by creating an artificial discontinuity. Ruscio et al. (2006) also suggest the taxon base rate in a sample needs to be ≥ .10 of the sample.

In order to meet these requirements, participants for Study 1 were recruited from several sources. One source was an existing dataset collected by the Austin Repatriation Hospital PTSD treatment program for Vietnam War Veterans (N = 322, all male). The veterans ranged in age from 50 to 75 years (exact ages or demographic data were not available).

Another source comprised 280 participants from clinical and non-clinical populations ranging in age from 17 to 67 years (M = 27.80 years, SD = 12.77). There were 47 males (M = 26.98 years, SD = 11.72) and 232 females (M = 27.97 years, SD = 12.99) (87.9% female). In order to obtain a heterogeneous sample, participants were recruited through a number of avenues. Sixty one percent came via the undergraduate psychology subject pool at Swinburne University of Technology in Melbourne, Australia, 5.7% through an Internet survey, and to increase the likelihood of achieving a full range of dissociation scores, the remaining 33.3% were recruited via a number of
avenues. These were: (a) via a snowball sample commencing with associates of the researchers; (b) through a community counselling centre; and (c) through clinicians with an interest in dissociative phenomena.

The final Study 1 sample of 602 participants comprised 53.5% veterans, 27.7% students, and the remaining 18.8% were via associates of the researcher, from questionnaires placed in counselling clinics, and from an internet site. In the overall sample, there were 369 males (61.3%) and 232 females (38.54%). One participant did not state gender.

6.2.2 Measures

All participants completed either the original DES (E. M. Bernstein & Putnam, 1986) or the revised DES-II (Carlson & Putnam, 1993) (Appendix A1), both of which are a 28-item self-report measure that asks participants to indicate the frequency of different dissociative experiences in three content areas: absorption, amnesia for dissociative states, and depersonalisation/derealisation. The 280 participants from clinical and non-clinical populations also completed a range of other questionnaires (reported in Chapter 7) and nine of these 280 completed a further questionnaire (the DDIS, Appendix B3).

The two versions of the DES differed only in response format. Carlson and Putnam (1993) compared means scores for the two versions and concluded that the instruments generate comparable quantification of dissociation. The veteran sample used the original 1986 version of the DES, which uses a visual analogue scale response format. The second data source used the DES-II on which each item is measured by asking participants to circle a numerical percentage (e.g., 0%, 10%, 20%, 30%, up to 100%) to indicate the percentage of time they experience each phenomenon. Examples of items are: “Some people find that when they are watching television or a movie they become so absorbed in the story that they are unaware of other events happening around them”; “Some people find that sometimes they are listening to someone talk and they suddenly realise that they did not hear part or all of what was just said”; “Some people find evidence that they have done things that they do not remember doing”; and “Some people sometimes have the experience of feeling that their body does not seem to belong to them.”
On both the DES and DES-II, the scale score is the average of the 28 item scores. Some studies use a cut-off score of 20 to indicate high levels of dissociation (e.g., Collins, 2004b) and others use a cut-off score of 30 to indicate clinical levels of dissociation (e.g., J. G. Allen et al., 2002; Carlson & Putnam, 1993).

Test re-test reliability for the DES is high ($r = 0.84$: E. M. Bernstein & Putnam, 1986); ($r = 0.96$: Frischholz et al., 1990) and the median correlation coefficient for item scores is $r = .60$ (E. M Bernstein & Putnam). Internal consistency is also high: $\alpha = .95$ (Frischholz et al., 1990); $\alpha = .93$ (Wright & Loftus, 1999); and $\alpha = .92$ (Zingrone & Alvarado, 2001).

The DES-T is an 8-item subset of the DES that is purported to identify features of dissociation that are pathological (N. G. Waller et al., 1996) (items 3, 5, 7, 8, 12, 13, 22, and 27). The DES-T has two primary content areas: amnesia for dissociative states, and derealisation or depersonalisation. None of the items aim to measure normative dissociative experiences such as absorption and imaginative involvement (N. G. Waller & Ross, 1997). The DES-T is measured in the same manner as the DES, with scores ranging between 0 and 100, with higher scores indicating a greater degree of pathological dissociation. One study (Zingrone & Alvarado, 2001) reported a Cronbach's alpha of .75, and a significant correlation with the DES, $r(309) = .79, p < .001$.

### 6.2.3 Procedure

There were two avenues of recruitment. The first was a more homogeneous sample consisting of Vietnam veterans. Data had been collected from 1996 to 2001 as part of the Austin Repatriation Hospital PTSD treatment program for Vietnam War Veterans. As part of routine clinical practice, the veterans completed the DES, and this data was made available for the purposes of the current project. The researcher assisted in cleaning the data and preparing it for analysis, but did not participate in the initial data collection process. Ethical approval was given for the use of the material by the Human Research Ethics Committee, Research Support Unit, Heidelberg Repatriation Hospital.

The second source of participants led to a more heterogeneous range of participants. This data collection received ethical approval from the Swinburne University of Technology Human Research Ethics Committee. Various modalities were
used to obtain a sample with a diverse range of DES scores from normal to pathological. These were: (a) via a snowball sample commencing with associates of the researchers; (b) through a community counselling centre; (c) through an internet survey; (d) through an undergraduate psychology subject pool at Swinburne University of Technology, Melbourne; and (e) through clinicians with an interest in dissociative phenomena. Participation was voluntary, and if the participant chose, was anonymous. Participants were free to withdraw at any time. For a further description of this sample and how participants were recruited, see Chapter 7, sections 7.3.1 and 7.3.3.

Identification of a taxon requires that a significant proportion of the sample is taxon members. Prior to taxometric analysis, two methods were used to determine this proportion. First, following Carlson and Putnam (1993), the overall DES scores were summed and the percentage of participants with DES scores over 30 was calculated. Of the total sample (N = 602), 29.7% of participants reported clinical levels of dissociation 30% of the time or more, that is, scored 30 and over. One respondent reported dissociative experiences 79% of the time. In addition, at the lower end of the scale, 35.5% of sample reported dissociative experiences less than 15% of the time, and 21.6% reported dissociative experiences less than 10% of the time.

Second, Bayesian probabilities of belonging to the dissociative taxon were calculated on DES data using the algorithm of N. G. Waller and Ross (1997; Appendix) (see Appendix C1). Twenty two participants were unable to be assigned a score in this algorithm due to missing data. Of the remaining 580 participants, an individual was assigned to the taxon class if his or her Bayesian membership score was greater than 0.90. Eighty participants (13.3%) met this criterion. Of these, 39 participants (6.5%) were from the heterogeneous sample, and 41 (6.8%) were from the veteran sample. One hundred and thirty eight (22.9%) of the sample had a membership score of above 0.50. Under both approaches, the sample appears adequate to test for the existence of a taxon.

6.2.4 Data Screening, Sample sizes, and Assumptions

For the veteran data set, all DES data were checked for missing data and incorrect entires prior to analyses (for the second data set, see screening procedures conducted for Study 2, Chapter 7, section 7.3.4). Missing value analysis indicated a
small number of cases with missing values. Owing to the relatively small number of missing responses and being unable to establish any pattern of non-response, missing cases \((n = 10)\) were dealt with by deletion, leaving 592 cases retained for analysis.

There are a number of data considerations when conducting taxometric analyses in order to produce interpretable and meaningful results (J. Ruscio & Ruscio, 2004b). The considerations are that the sample data: (a) is from a large sample \((N = 300-600)\) that is not selected according to specific criteria; (b) contains enough members of the supposed taxon (see section 6.4.3); (c) contains multiple, quasi-continuous indicators with enough variation to allow for cases to be divided between multiple sub samples; (d) contains indicators that adequately and uniquely represent the target construct; (e) and contains indicators that are sufficiently valid and have negligible nuisance covariance. For indicators to be considered valid they need to be able to separate the conjectured latent classes on each indicator. If the indicator score distributions of the two groups overlap too much (that is, validity is too low), taxometric procedures may be unable to detect taxonic boundaries (J. Ruscio et al., 2006). The validity coefficient commonly used is Cohen’s \(d\) for two groups and the general rule suggests indicators with a mean separation of less than \(d = 1.25\) should not be used (Meehl, 1995). Indicator validity of the DES was assessed within both taxometric procedures employed and was found to be adequate (see Table 6.3). The Study 1 DES data met these assumptions.

6.3 Results

Internal reliability of the total DES and the DES-T was very high, and both the DES and DES-T were highly skewed (See Table 6.1). For many taxometric procedures, positively skewed indicators may make it more difficult to distinguish results for taxonic and dimensional structures (J. Ruscio et al., 2006). However, Ruscio et al. suggest that this is not a concern when the skew arises from the mix of taxon and complement groups because a small taxon mixed with a larger complement generates a positive skew in a mixed group sample.
Table 6.1

Means, Standard Deviations, Cronbach’s Alpha, Skewness and Kurtosis for the DES, and the DES-T for Sample 1, Sample 2, and the Combined Sample.

<table>
<thead>
<tr>
<th>Group</th>
<th>DES (28 items)</th>
<th>DES-T (8 items)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Sample 1</td>
<td>26.20</td>
<td>14.15</td>
</tr>
<tr>
<td>Sample 2</td>
<td>20.10</td>
<td>16.39</td>
</tr>
<tr>
<td>Combined</td>
<td>23.36</td>
<td>15.52</td>
</tr>
<tr>
<td></td>
<td>Skewness</td>
<td>Kurtosis</td>
</tr>
<tr>
<td>Combined</td>
<td>.92</td>
<td>.54</td>
</tr>
</tbody>
</table>

N = 602

6.3.1 Latent Structure of the DES

Exploratory factor analysis using Principal Axis Factoring (PAF) and promax rotation was conducted. Oblique rotation (Promax) was chosen because the factors were expected to be correlated.

A number of indications demonstrated that the data were suitable for factor analysis. Inspection of the correlation matrix showed the majority of the coefficients were .3 and above. The KMO measure of sampling adequacy was high (.95) and Bartlett's test of sphericity was significant ($\chi^2_{(378)} = 8755.26, p < .001$). Initial communalities ranged from .31 to .73, with the majority greater than .50. The significance level set for factor loadings was .30.

---

6 PAF is one of the methods of exploratory factor analysis that is now a more preferred extraction method than the more popular Principle Components Analysis (PCA) used in the past (see Costello & Osborne, 2005 for explanation of PAF). Factor analysis methods, such as PAF, recognise that there is error in variables and, therefore, give more unbiased loadings than PCA (Gorsuch, 1990). Many researchers suggest using maximum likelihood (ML) extraction because it gives a better result than PCA (Bentler & Kano, 1990; Dell, 2005; Finch & West, 1997; Gorsuch, 1990; Velicer & Jackson, 1990). However, Costello and Osborne state that ML is best used on normally distributed data while PAF is the preferred choice for highly skewed data, such as the DES; hence the use of PAF in the factor analysis of the DES.
Four approaches were used to determine the number of factors to extract. First, the scree plot was inspected. This showed a clear elbow after the first factor. This first factor explained 42.63% of the variance in DES scores. Second, the number of factors with eigenvalues greater than 1.0 was considered. There were four factors explaining 42.63%, 5.55%, 5.16% and 4.14% of variance in DES scores respectively (with a cumulative variance of 57.48%). Third and fourth, both parallel analysis and Velicer’s minimum average partial (MAP) test (Zwick & Velicer, 1986) were performed and both suggested a minimum of three factors in the DES.

A three factor extraction was interpreted. This solution tended to support the three content areas (absorption, amnesia for dissociative states, and depersonalisation/derealisation) suggested in the literature (e.g., Carlson & Putnam, 1993; Waller & Ross, 1997) (see Table 6.2). One item (#19) failed to reach the factor loading score of .3 and there were eight items (#s 2, 4, 5, 8, 15, 16, 18 and 24) that cross loaded significantly at the .3 level on two factors. The first factor was made up of 11 items to do with amnesia, or not remembering things, five of which cross-loaded on either factor 2 or factor 3. Factor two contained nine absorption items, one of which (#19) did not reach the required factor loading of .3. The third factor consisted of the six depersonalisation/derealisation items together with two absorption items, which could conceptually be seen as belonging to Factor 3. The 8 DES-T items were scattered throughout the 3 factors with 7 items fitting either with the amnesia or depersonalisation items. One DES-T item (#22) loaded on the absorption factor.
## Table 6.2

**Factor Structure of the Dissociative Experiences Scale in the Combined Sample**

<table>
<thead>
<tr>
<th>Factor names and Items</th>
<th>Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>F1: Amnesia/inability to remember</strong></td>
<td></td>
</tr>
<tr>
<td>25 Finding evidence of doing things you don’t remember</td>
<td></td>
</tr>
<tr>
<td>3* Finding yourself in a place with no idea how got there</td>
<td>.65</td>
</tr>
<tr>
<td>26 Finding writings, etc., among belongings you can’t remember doing</td>
<td>.58</td>
</tr>
<tr>
<td>4 Finding yourself dressed in clothes you don’t remember putting on</td>
<td>.58</td>
</tr>
<tr>
<td>9 Having no memory for important events, e.g., own wedding</td>
<td>.55</td>
</tr>
<tr>
<td>24 Not remembering whether you have done something or just thought about it</td>
<td>.55</td>
</tr>
<tr>
<td>8* Being told you sometimes don’t recognise family or friends</td>
<td>.54</td>
</tr>
<tr>
<td>2 Listening to someone talk, but not hearing all or part of what is said</td>
<td>.54</td>
</tr>
<tr>
<td>5* Finding new things in your belongings you don’t remember buying</td>
<td>.53</td>
</tr>
<tr>
<td>1 Driving car, or riding transport, but don’t remember all or part of the trip</td>
<td>.48</td>
</tr>
<tr>
<td>6 Being approached by people you don’t know who insist they have met you before</td>
<td>.48</td>
</tr>
<tr>
<td><strong>F2: Absorption</strong></td>
<td></td>
</tr>
<tr>
<td>20 You sit staring into space, not aware of passing time</td>
<td>.66</td>
</tr>
<tr>
<td>17 When watching TV, becoming so absorbed that you are not aware of surrounding events</td>
<td>.59</td>
</tr>
<tr>
<td>18 Becoming so absorbed in a fantasy/daydream it feels like it is really happening to you</td>
<td>.56</td>
</tr>
<tr>
<td>14 Sometimes remembering a past event so vividly that you feel you are reliving it</td>
<td>.52</td>
</tr>
<tr>
<td>22* Acting so differently in one situation compared to another, you seem as if two different people</td>
<td>.49</td>
</tr>
<tr>
<td>15 Not sure that things you remember really happened or whether they were just a dream</td>
<td>.48</td>
</tr>
<tr>
<td>23 Sometimes able to do things with amazing ease that would usually be difficult</td>
<td>.48</td>
</tr>
<tr>
<td>21 Talk out loud to yourself when alone</td>
<td>.39</td>
</tr>
<tr>
<td>19 You are able to ignore pain</td>
<td>.27</td>
</tr>
<tr>
<td><strong>F3: Depersonalisation/ Derealisation</strong></td>
<td></td>
</tr>
<tr>
<td>11 Sometimes looking in a mirror and not recognising yourself</td>
<td>.75</td>
</tr>
<tr>
<td>13* Sometimes feeling that your body does not belong to you</td>
<td>.71</td>
</tr>
<tr>
<td>12* Sometimes feeling that other people, objects, and the world around you are not real</td>
<td>.65</td>
</tr>
<tr>
<td>7* Feeling as though you are standing next to yourself, or see yourself as if looking at another person</td>
<td>.55</td>
</tr>
<tr>
<td>28 Looking at the world as if through a fog, things seem far away</td>
<td>.48</td>
</tr>
<tr>
<td>27* Hearing voices inside your head telling you what to do</td>
<td>.46</td>
</tr>
<tr>
<td>16 Experience of being in a familiar place but finding it strange and unfamiliar</td>
<td>.34</td>
</tr>
<tr>
<td>10 Being accused of lying when you don’t think you have lied</td>
<td>.26</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Eigenvalues</th>
<th>11.94</th>
<th>1.55</th>
<th>1.45</th>
</tr>
</thead>
<tbody>
<tr>
<td>% variance explained</td>
<td>42.63</td>
<td>5.55</td>
<td>5.16</td>
</tr>
</tbody>
</table>

* DES-T item
6.3.2 Taxometric Procedure

The taxometric method refers to a family of techniques used to furnish evidence for or against the existence of a taxon in a given set of indicators selected to represent the construct under study (N. G. Waller & Meehl, 1998). A hallmark of the method is the use of multiple independent tests to provide convergent evidence for a taxonic hypothesis. Two techniques, in particular MAMBAC (Mean Above Minus Mean Below a Cut) and MAXEIG (MAXimum EIGenvalue), are commonly used in tandem, and this approach was adopted here. The original MAXEIG program (N. G. Waller & Meehl) had several important limitations, which have now been addressed by Ruscio (2007). Ruscio’s modified program was used in the current project.

All taxometric procedures are based on a statistical method termed Coherent Cut Kinetics (CCK), which is "a method that looks consecutively at portions of data and does so in various ways to get multiple estimates of latent parameters" (Schmidt et al., 2004, p.43). These estimates are then graphed. The MAXEIG program is able to analyse more than three indicators of a construct at a time, evaluating the matrix of covariances as a whole rather than only two indicators as do other techniques, thus making it particularly powerful in clarifying low base-rate taxons (Waller & Ross, 1997). The MAXEIG procedure produces a graph and if there is a clear peak, it is considered taxonic. If there is no peak, it is considered nontaxonic.

MAMBAC, on the other hand, requires only two variables for an analysis, and can serve as a stringent internal consistency test for MAXEIG. Using a different method, MAMBAC also plots graphs and if the construct is continuous, the MAMBAC plot will be concave. If the data are taxonic, the MAMBAC plot will be the shape of an inverted parabola (Schmidt et al., 2004). For a more detailed description of the method, see Ruscio et al. (2006). Simulated data sets for both dimensional and taxonic data were generated as per Ruscio et al. (2004), using Ruscio’s (2007) S-Plus and R software.

MAMBAC and MAXEIG were conducted on two sets of indicators (see below) with 50 cuts used for MAMBAC and 50 windows with 0.9 overlap used for MAXEIG. The taxonicity of each individual curve was rated and is presented along with validity, nuisance covariance and fit indices in Table 6.3. See also Figure 6.1 for averaged curves with matching simulated data.
6.4 Taxometric Results

Taxometric analyses were conducted using the R Computing Environment version 204/12/2007 (J. Ruscio, 2007).

Two sets of potential taxon indicators were considered: (a) the eight DES-T items from the DES (N. G. Waller et al., 1996; N. G. Waller & Ross, 1997) (items 3, 5, 7, 8, 12, 13, 22, and 27); and (b) a novel set of nine amnesic items chosen by the researcher on the basis that amnesia is the construct that distinguishes the dissociative disorders most succinctly from other mental disorders (Cardeña et al., 1996). The particular items (3, 4, 5, 6, 8, 9, 10, 25, and 26) were consistent with an amnesia factor and chosen on the basis of consensus statements and research findings in the literature (Carlson & Putnam, 1993; Ross et al., 1991b; Sanders & Green, 1994; N. G. Waller et al., 1996) (refer to Chapter 1, section 1.13.3). It is noted there is some item overlap between the DES-T and the set of nine amnesic items (items 3, 5, and 8).

**The 8-item DES-T**: The estimated validity of the 8 DES-T indicators was sufficient, all having $d > 1.25$, as recommended by Meehl (1995). The majority of curves in MAMBAC and MAXEIG analyses favoured a dimensional interpretation with few curves showing any evidence of taxonicity. The averaged curves, although rising in a manner often associated with a low base rate taxon, come from skewed distributions and show shapes that more closely resembled the simulated dimensional data. Further, they do not show any evidence of a slight convex shape at the end of the curve which often accompanies a true taxon. The CCFI was very close to 0.50 (evidence neither for nor against taxonicity) in both analyses. Base rates estimates from the two procedures, while internally quite consistent, failed to show consensus across methods.

**The nine amnesic items**: The estimated validity for the nine amnesic items was also sufficient. The majority of curves in both MAXEIG and MAMBAC displayed dimensional shapes. The averaged plots had similar properties to those for the DES-T. The CCFI slightly favoured a dimensional interpretation but were close to the ambiguous 0.5 value. Base rate estimates were inconsistent between methods (see Table 6.3).
Table 6.3

*MAMBAC and MAXEIG Mean Validities, Nuisance Covariances, Base Rates, CCFI, and Taxonicity for DES-T and Amnesic Items*

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Indicators</th>
<th>MAMBAC</th>
<th>MAXEIG</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Mean Validity</td>
<td>Nuisance Covariance*</td>
</tr>
<tr>
<td>DES-T items</td>
<td>8</td>
<td>1.84 (0.32)</td>
<td>.13, .17</td>
</tr>
<tr>
<td>Amnesic items</td>
<td>9</td>
<td>1.74 (0.27)</td>
<td>.18, .18</td>
</tr>
<tr>
<td>DES-T items</td>
<td>8</td>
<td>1.70 (0.30)</td>
<td>.21, .17</td>
</tr>
<tr>
<td>Amnesic items</td>
<td>9</td>
<td>1.66 (0.19)</td>
<td>.23, .19</td>
</tr>
</tbody>
</table>

* Complement and taxon respectively
† Number of curves showing evidence of taxonicity

CCFI\(^7\) – Comparison curve fit index. Values range from 0 – 1: < .5 indicates dimensionality, > .5 indicates taxonicity; .50 represents equivalent fit for both structures.

6.5 Overview of Findings

Contrary to expectations, taxometric analyses did not provide evidence for a dissociative taxon in the present sample. These results are inconsistent with the findings of Waller et al. (1996), Waller and Ross (1997), and Waelde et al. (2005). In addition, there was no evidence of a taxon based on a novel set of indicators (nine amnesic items from the DES). The results for both sets of items showed that the majority of curves in the MAMBAC and MAXEIG analyses favoured a dimensional approach. Few curves showed any evidence of the convex shape indicative of taxonicity. Therefore, on the basis of the present analysis, it is concluded that this sample represents a collection of individuals that differ quantitatively and not categorically in their tendency towards dissociative experiences. The present results, therefore, highlight both the necessity for caution in sub-typing individuals exhibiting high dissociation scores according to the 8-

\(^7\) CCFI: quantifies “the extent to which taxometric curves for the research data match those in the empirical sampling distributions generated through analyses of simulated taxonic and dimensional comparison data that reproduce the distributional and correlational characteristics of the research data” (Ruscio et al., 2006, p.187).
item DES-T, and the need for further research with other samples. These results are discussed in greater detail in Chapter 9.

Figure 6.1. MAMBAC and MAXEIG plots for research, simulated taxonic, and simulated dimensional data for both DES-T and amnesic indicators.
CHAPTER 7

STUDY 2. PREDICTORS OF DISSOCIATION: CHILDHOOD TRAUMA, PERSONALITY, FANTASY PRONENESS, AND RESILIENCE

Chapter 7 contains the aims, hypotheses, method, and results of Study 2, which examined possible predictors of dissociation. Three groups of hypotheses were examined and three research questions explored, the findings of which are discussed in detail in Chapter 9.

7.1 Aims of Study 2

Based on literature in Chapters 2 and 3, the primary aim of Study 2 was to investigate dissociation as an outcome of childhood trauma, adult personality, resilience, and fantasy proneness. A secondary aim was to provide an alternative strategy for investigating the taxonicity hypothesis and complement the findings of Study 1 by examining possible multiple underlying causal or predisposing factors of higher dissociation scores in individuals. Results of Study 1 suggest that dissociation is a continuous construct with little evidence of a distinct subgroup whose dissociation can be characterised as pathological. There are theoretical implications if phenotypic dissociation is continuous. If this is so, then it is more likely to arise from multiple causal influences rather than a single present/absent causal factor that determines category membership (Grove, 2008; Meehl, 1992; Widiger, 2001).

Dissociation was measured in two ways, first as a continuous dimension from normal experiences through to the severe symptoms characteristic of dissociative identity disorder, and second as pathological as distinct from normal. If there is a distinct dissociative taxon that is different qualitatively from normals, then the predictors may differ markedly from those shown for dissociation as a continuous dimension. Therefore, this study aimed to explore this difference. A further aim was to explore age differences in reporting dissociative experiences in relation to the independent variables of childhood trauma, personality, fantasy proneness and resilience. Two age groups were
determined, 17 to 22 years and 23 to 70 years, based on research that suggests that dissociative experiences decline with age after young adulthood (Ross et al., 1989d).

7.2 Hypotheses and Research Questions

A number of hypotheses tested the relationship between dissociation (as measured on the 28-item DES) and the predictor variables of childhood abuse (with a specific focus on sexual abuse), personality, and fantasy proneness. Relationships between predictor variables were also tested.

First, two related hypotheses were tested regarding childhood trauma and dissociation.

Hypothesis 1: It was expected that there would be a direct positive pathway from childhood abuse to dissociation, that is, dissociativity would increase with more severe childhood abuse. This prediction was based on numerous studies that have demonstrated that childhood abuse is related to elevated levels of dissociation (e.g., Chu & Dill, 1990; Chu et al., 1999; Gillen, 1996; Irwin, 1998; Lipschitz, Kaplan, Sorkenn, & Chorney, 1996).

Hypothesis 2: In examining the childhood abuse subtypes, it was also expected that there would be a direct positive pathway from sexual abuse to dissociation.\(^8\)

Second, two related hypotheses examined the relationship between dissociation and the personality variables of N and fantasy proneness.

Hypothesis 3: Based on the findings of numerous studies (e.g., de Silva & Ward, 1993a; Groth-Marnat & Jeffs, 2002; Kwapi et al., 2002; Ruiz et al., 1999), it was expected that N would have a direct positive pathway to dissociation.

Hypothesis 4: It was also expected that fantasy proneness would have a direct positive pathway to dissociation based on findings of previous research (e.g., Elzinga et al., 2002; Merckelbach et al., 2005; Merckelbach et al., 1999).

Third, two hypotheses tested the relationships between the predictor variables (childhood abuse, fantasy proneness, and personality).

\(^8\) All subscales of the CTQ were tested as predictors of dissociation, and results are presented in Appendix D.1
**Hypothesis 5:** It was expected that there would be a significant positive pathway from childhood abuse to fantasy proneness based on the findings of studies cited in Chapter 3, section 3.3.5 (Greenwald & Harder, 1997; Pekala et al., 2001; Pekala et al., 1999; Rauschenberger & Lynn, 1995). Some research (Merckelbach et al., 2002; Merckelbach & Jelicic, 2004) also suggests fantasy proneness has a mediating role between childhood abuse and dissociation, therefore a further exploration would examine whether there is an indirect pathway from child abuse to dissociation via fantasy proneness.

**Hypothesis 6:** Similarly, it was expected that there would be a significant positive pathway from childhood abuse to N based on studies in Chapter 3, section 3.2.3.2 (B. Allen & Lauterbach, 2007; Mathews et al., 2008; Roy, 2002). Two related explorations would examine whether there was an indirect effect of child abuse on dissociation via N, and whether there is an indirect pathway between childhood abuse and fantasy proneness via N. Only two studies were found that reported an association between N and fantasy proneness and their results were conflicting (McCrae & Costa, 1997; Sánchez-Bernardos & Avia, 2004). Figure 7.1 depicts these possible relationships for all hypotheses in pictorial form.

![Figure 7.1. A model depicting the possible associations between dissociation and child abuse, personality, and fantasy proneness based on the above six hypotheses.](image-url)
While the hypotheses tested findings from previous research, the research questions sought answers in areas where little or no prior research was found, or where there were mixed results, especially in the areas of (a) pathological dissociation and its predictors; (b) resilience and dissociation; and (c) age differences in dissociative experiences.

An overarching research question was to explore how models changed when the 8-item DES-T, purporting to measure pathological dissociation, was used in place of the 28-item DES as the outcome variable. If pathological dissociation is categorically distinct from normal dissociation, there is the likelihood of only one predictor, childhood trauma. This research question is pivotal in the exploration of an alternative strategy for investigating the taxonicity hypothesis in Study 2. If the models predicting continuous dissociation are virtually identical to models predicting “taxon” membership (a variable potentially specific to categorical pathological dissociation), it brings the taxon as measured by the DES-T into doubt.

No research that has examined empirically the relationship between dissociation and resilience. Therefore, research question 2 aimed to explore that relationship, as well as the way the other predictors related to both dissociation and resilience within the models. The final exploration was to examine whether there are age differences in reporting of dissociativity and its predictors. Prior research suggests dissociativity decreases with age (e.g., Ross et al., 1989d; Spitzer et al., 2003; Vanderlinden et al., 1991; Vanderlinden et al., 1995), but this process has not been modelled with predictors to examine what it looks like for younger and older groups. These differences were modelled separately for the ages 17-22 years and 23-70 years.

7.3 Method

7.3.1 Participants

The sample recruited for Study 2 is the second data set used for Study 1 consisting of 280 participants (see Chapter 6 for details). An item asking about experiences of psychotherapy showed that 36.8% of the sample for Study 2 were in therapy or had participated in therapy in the past, and 61.4% had not been in therapy (1.8% failed to answer this question). Further demographics are listed in Table 7.1.
Table 7.1  
Demographics for Study 2 Participants: Marital Status, Employment Status, Education Level, and Ethnicity.

<table>
<thead>
<tr>
<th>Marital status</th>
<th>Married, first time</th>
<th>Married, married previously</th>
<th>Divorced/ separated</th>
<th>Single, never married</th>
<th>Relationship, live separate</th>
<th>Other</th>
<th>Not stated</th>
</tr>
</thead>
<tbody>
<tr>
<td>n (%)</td>
<td>56 (20)</td>
<td>23 (8.2)</td>
<td>18 (6.4)</td>
<td>109 (38.9)</td>
<td>71 (25.4)</td>
<td>7 (2)</td>
<td>1 (0.4)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Employment status</th>
<th>Employed full time</th>
<th>Employed part time</th>
<th>Full time student</th>
<th>Part-time students</th>
<th>Home duties</th>
<th>Unemployed</th>
<th>Retired</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>n (%)</td>
<td>35 (12.5)</td>
<td>39 (13.9)</td>
<td>139 (49.6)</td>
<td>28 (10)</td>
<td>15 (5.4)</td>
<td>11 (3.9)</td>
<td>5 (1.8)</td>
<td>8 (2.5)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Education level</th>
<th>Less than year 12</th>
<th>Completed year 12</th>
<th>Incomplete diploma/degree</th>
<th>Completed diploma/degree</th>
<th>Incomplete post graduate</th>
<th>Completed post graduate</th>
</tr>
</thead>
<tbody>
<tr>
<td>n (%)</td>
<td>12 (4.3)</td>
<td>7 (2.5)</td>
<td>193 (68.9)</td>
<td>36 (12.9)</td>
<td>17 (6.1)</td>
<td>15 (5.4)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Australia</th>
<th>Europe</th>
<th>UK &amp; NZ</th>
<th>Asia</th>
<th>North America</th>
<th>Africa, India, Sth America</th>
<th>Not stated</th>
</tr>
</thead>
<tbody>
<tr>
<td>n (%)</td>
<td>211 (75.4)</td>
<td>47 (13.6)</td>
<td>3 (1.1)</td>
<td>12 (4.3)</td>
<td>1 (0.4)</td>
<td>3 (1.2)</td>
<td>3 (1.1)</td>
</tr>
</tbody>
</table>

N = 280

7.3.2 Materials

Each participant completed a questionnaire comprising (a) demographic items regarding gender, age, marital status, ethnicity, education level, employment status, and therapy status, and (b) five self-report measures used to assess personality, resilience, dissociative experiences, childhood trauma, and fantasy proneness. Two other scales were also included but not used in the current project. A copy of the questionnaire, including the plain language statement, is attached in Appendix A.6. The five self-report measures were as follows:

Dissociation: In examining dissociation, the Dissociative Experiences Scale-II (DES-II) (Carlson & Putnam, 1993) (Appendix A.1) and the 8-item DES-T were used (see Chapter 6 for details).

Personality: The 60-item NEO-FFI (Costa & McCrae, 1992) (Appendix A.3) was used to measure the traits of the FFM (N, E, O, A, and C). Each of the five domain
scales contains 12 items. Examples items are: N – “Too often, when things go wrong, I get discouraged and feel like giving up”; E – “I am a cheerful, high-spirited person”; O – “I often enjoy playing with theories or abstract ideas”; A – “I generally try to be thoughtful and considerate”; and C – “I try to perform all the tasks assigned to me conscientiously.” Respondents rate each item on a 5-point Likert scale, with 1 = “strongly disagree or definitely false,” to 5 = “strongly agree or definitely true”. Domain scores are obtained by summing each respondent’s score on the 12 items after reverse coding negatively worded items.

Costa and McCrae (1992) reported adequate internal consistencies of .86, .77, .73, .68, and .81 for N, E, O, A, and C respectively, and reported clear evidence of both convergent and discriminant validity for the NEO-FFI. An Australian study also reported adequate internal consistencies of .87, .80, .77, .75, and .85 for N, E, O, A, and C respectively (Murray, Rawlings, Allen, & Trinder, 2003). Murray et al. also reported robust test-retest reliabilities for six data collections across 30 months.

Childhood Trauma: The Childhood Trauma Questionnaire (CTQ) (D. P. Bernstein & Fink, 1998) (Appendix A.2), a 28-item self-report inventory, was used to assess histories of abuse and neglect in childhood. The CTQ consists of five five-item subscales plus a 3-item Minimisation/Denial Scale for detecting false-negative trauma reports. The five subscales reflect common definitions of child abuse and neglect and each item begins with the phrase “When I was growing up…”. The subscales are: (a) Emotional abuse (e.g., “People in my family called me things like ‘stupid’, ‘lazy’, or ‘ugly’”); (b) Physical abuse (e.g., “I was punished with a belt, a board, a cord, or some other hard object”); (c) Sexual abuse (e.g., “Someone tried to touch me in a sexual way, or tried to make me touch them”); (d) Emotional neglect (e.g., “My family was a source of strength and support”); and (e) Physical neglect (e.g., “I had to wear dirty clothes”). Each item is measured on a 5-point Likert scale where 1 = "Never True", to 5 = “Very Often True”.

For each of the five subscales, after reverse coding relevant items, the five item scores are summed to produce the subscale total scores. For the 3-item Minimisation/Denial Scale, 1 point is given for each item endorsed with a score of 5 (very often true), and 0 is given for each item endorsed with 4 or less. Possible score range is 0 to 3, with
any score from 1 to 3 suggesting possible under-reporting of maltreatment. For a total score for childhood trauma, the scores for the five subscales are totalled giving a possible range of 25 to 125, with higher scores indicating a greater degree of childhood abuse.

D. P. Bernstein and Fink (1998) computed internal consistency reliability coefficients, which ranged from satisfactory to excellent: Emotional abuse, $\alpha = .89$, Physical abuse, $\alpha = .82$, Sexual abuse, $\alpha = .92$, Emotional neglect, $\alpha = .89$, and Physical neglect, $\alpha = .66$. Test-retest reliabilities showed that respondents’ trauma reports on the CTQ are stable over an average testing period of 3.6 months in a sample of adult substance abusers. Test retest reliabilities were, $r = .80$, .80, .81, .81, and .79 respectively, with an overall reliability of $r = .86$.

**Fantasy Proneness:** Fantasy proneness was measured on the 25-item self-report Creative Experiences Questionnaire (CEQ) (Merckelbach et al., 2001) (Appendix A.4). The CEQ was selected because Merckelbach et al. especially paid attention to reducing item and format overlap with the DES. Merckelbach et al. also removed items that were too invasive, were ambiguous, or that overlapped with highly related constructs to eliminate tautological findings. CEQ items address developmental antecedents of fantasy proneness, intense elaboration of and profound involvement in fantasy and dreaming, and the concomitants and consequences of daydreaming. The CEQ has a forced answer format, requiring yes/no answers. The yes-answers for CEQ items are summed to obtain a total score ranging from 0 to 25, with higher scores indicating higher levels of fantasy proneness. Examples of items are: "As a child, I thought the dolls, teddy bears, and stuffed animals that I played with were living creatures" and "Many of my fantasies have a realistic intensity". Merckelbach et al. (2001) reported that test-retest reliability (6 weeks) in one study was $r = .95$. Internal consistency for two studies using the CEQ were $\alpha = .78$, and $\alpha = .73$ (Merckelbach et al., 1999) and in a further study $\alpha = .82$ (Merckelbach et al., 2005).

**Resilience:** Resilience was measured on the Resilience Scale (RS) (Wagnild & Young, 1993) (Appendix A.5). The RS is a 25-item self-report scale with a 7-point Likert response format (1 = "disagree", to 7 = "agree"). All items are worded positively, for example, "I usually manage one way or another." Possible scores range from 25 to
175, with higher scores indicating greater resilience. Wagnild and Young reported high reliability, with $\alpha = .91$, and item-to-item correlations ranging from $r = .37$ to $r = .75$. Humphreys (2003) reported a Cronbach’s alpha of .94.

### 7.3.3 Procedure

The sampling aims were heterogeneity and a range of dissociation scores. To achieve this, a number of recruiting avenues were pursued. First year psychology students at Swinburne University of Technology participated as part of a course requirement, and a number of third year psychology students from the same university also volunteered to participate. Students returned their completed forms to a locked box on the university campus. In addition, a snowball sampling method was used amongst adult associates of the researchers. Colleagues and friends asked acquaintances if they would be willing to participate, and completed forms were returned in prepaid envelopes. The Internet survey (see Appendix A.7 for example web pages) was posted on the Swinburne University site and participants completed it and submitted their survey electronically.

Questionnaires were left at a number of counselling clinics across Melbourne for clients to take and complete. Other clinicians specifically asked clients if they would be willing to participate. Prepaid envelopes were offered with the questionnaires for their return, or the clinicians collected the completed forms from their clients and handed them back personally. (See Appendices A.6, A.9, and A.10 for plain language statements and recruitment letters/overheads for Study 1 participants).

Participation was on a voluntary basis, and if the participant chose, was anonymous. Participants were free to withdraw at any time. Those who were interested in participating in further research were invited to give their names and contact details at the end of the questionnaire. One hundred and fifty participants (53.6%) gave permission to be contacted. All identifying information was removed from the questionnaires and stored in a separate location from the data. Of all hard copy questionnaires distributed ($N = 566$), there was a 49.5% return rate.

Ethics approval was initially obtained for both Studies 2 and 3 from the Human Research Ethics Committee, Swinburne University of Technology in June 2004. For
changes to Study 3, ethics approval was obtained from the Human Research Ethics Committee, Swinburne University of Technology on April 8 2005.

7.3.4 Data Analysis

7.3.4.1. Data screening, sample sizes, and assumptions.

Data screening: Data were screened for out of range values using frequency tables and descriptive statistics. Any data entry errors were corrected, and scale items that needed to be reverse-coded were recoded. Missing values were then replaced with the series mean for all scales except for the CEQ for which missing values were replaced subject wise. Scale scores were created if there were less than seven missing values on a given scale. The syntax used for replacing missing values in the CEQ is included in Appendix C.2. As missing data can have a marked effect on structural equation modelling analyses (Hair, Anderson, Tatham, & Black, 1998), one participant was omitted from the data set for the SEM analyses due to the number of missing values in the CEQ, which reduced the sample size to \( N = 279 \).

Sample size considerations for regressions, factor analysis, and structural equation modelling: (a) Hierarchical regressions: In calculating the required sample size for multiple regressions, it is necessary to use \( N > 50 + 8m \) (where \( m \) = number of independent variables) (Pallant, 2005). More cases are needed if the dependent variable is skewed. In the current project, the number of independent variables used in the initial regression analysis was eight, increasing to 11 when the individual CTQ scales were used in the regression analyses, which means the sample size of 279 was more than sufficient even though the dependent variable, dissociation, was positively skewed.

(b) Factor analysis: In the past it has been common practice to base sample size for factor analyses on the number of measured variables in the study (e.g., 10:1, Fabrigar, Wegener, MacCallum, & Strahan, 1999). However, Fabrigar et al. suggest there are drawbacks in determining sample size this way because adequate sample size is more influenced by “the extent to which factors are overdetermined and the level of the communalities of the measured variables” (p.274). In addition, Costello and Osborne (2005) state that sample sizes can be relatively small if the data are “strong”, i.e., uniformly high communalities without cross loadings and several variables strongly
loaded on each factor. If this is not the case, then larger samples are required. Tabachnick and Fidell (2001) also suggest that sample size has to be large enough to ensure that correlations can be reliably estimated, and state that 300 is a good sample size. The sample for Study 2 approaches that required number ($N = 279$) and is, therefore, considered an adequate size for factor analysis.

(c) Structural Equation Modelling (SEM): Sample sizes for SEM are also required to be large (e.g., Hair et al., 1998; Kline, 2005; Lani, 1996-2006; Loehlin, 1987). According to Kline, the necessary sample size is determined by a number of factors, including the size of the model. More complex models need larger sample sizes in order for the results to be reasonably stable. Kline suggests that less than 100 is small, 100-200 is a medium size sample, and samples greater than 200 are considered large. Hair et al. (1998) also state that larger samples are needed if the data show non-normal characteristics. The number of participants in the current project, Study 2 ($N = 279$) is, therefore, considered adequate for SEM analyses.

Normality: A number of scales and subscales for Study 2 were strongly positively skewed, especially the DES, the DES-T, and the CTQ (skewness = 1.13, 1.64, 1.18 respectively). It was expected that they would be positively skewed because the majority of individuals in a normal population record low scores on these variables. While a number of researchers suggest that skewed data can be transformed before analyses are conducted (Kline, 2005; Pallant, 2005; Tabachnick & Fidell, 2001), Tabachnick and Fidell observe that results from transformed variables are not easily interpreted. In addition, Lani (1996-2006) states that when conducting SEM analyses with larger samples of over 200 participants, problems with non-normality are minimised. If necessary, an added post hoc adjustment to account for non-normality, the Bollen-Stine bootstrap, can be used in SEM. Therefore, after taking the above into account, the variables in the current research were not transformed.

Outliers: Although statistical results can be profoundly affected by outliers, those individuals with scores that met criteria as outliers were not deleted. This was because participants with high dissociation scores and with reported childhood abuse were deliberately targeted for this study. This meant that some of these participants were univariate or multivariate outliers in scales such as the DES, the DES-T, and especially
the CTQ. Given the extreme skew on the DES and CTQ, regression analyses were run a second time with the top scoring case in each scale excluded. The pattern of findings was unaffected and the cases were included in all subsequent analyses.

### 7.3.4.2. Analytic approach.

SEM analyses were conducted to further explore these relationships between the variables because regressions do not allow explorations of this type (Holmes-Smith, Coote, & Cunningham, 2006). For SEM analyses, latent variables models were used with one indicator for each latent construct (i.e., total scale score) corrected for measurement error (Munck, 1979). Because the ratio of parameters estimated to sample size within the smaller age-group samples (used in later analyses) was too low if using individual items as indicators, this approach was preferred and random error of measurement was corrected by: (a) specifying the error variance associated with each indicator as the product of its variance and 1 minus its estimated alpha coefficient (i.e., \( \text{SD}^2 \times [1 - \alpha] \), (see Holmes-Smith et al., 2006); and (b) Setting factor loadings using the formula \( \text{SD} \times \sqrt{\alpha} \). The following six indices used to evaluate goodness-of-fit were those recommended by Kline (2005) and Holmes-Smith et al. (2006): (a) significance of chi-square (\( p > .05 \) indicating satisfactory fit); (b) normed chi-square (\( \chi^2/df, 1 – 3 \)); (c) Root Mean Square Error of Approximation (RMSEA) (<.08); (d) Standardised Root Mean-Square Residual (SRMR) (<.05); (e) Comparative Fit Index (CFI) (> .95); and (f) the Tucker-Lewis Index (TLI) (> .95). General linear analyses (factor analyses, Pearson’s Bivariate correlations, and hierarchical multiple regressions) were carried out using SPSS version 15 for Windows. Structural equation modelling (SEM) was carried out using AMOS 16 for Windows using Maximum Likelihood estimation.

### 7.4 Results: Preliminary Analyses

#### 7.4.1 Internal Consistencies and Descriptives

As seen in Table 7.2, internal reliability was adequate for all scales, and distributions of norms were consistent with existing norms for Australian samples. As expected, DES and CTQ scores were positively skewed but, as explained earlier in Section 7.3.4.1, it was decided not to transform the data.
Table 7.2
Means, Standard Deviations, Observed and Theoretical Ranges, Alphas, Error Variances, Factor Loadings, and Norms of Dissociation, Personality, Resilience, Fantasy Proneness, and Trauma (N = 280)

<table>
<thead>
<tr>
<th>Variables</th>
<th>M</th>
<th>SD</th>
<th>Observed Range</th>
<th>Theoretical Range</th>
<th>Alpha</th>
<th>Error Variance$^1$</th>
<th>Factor Loadings$^2$</th>
<th>Norms</th>
</tr>
</thead>
<tbody>
<tr>
<td>DES</td>
<td>19.94</td>
<td>16.21</td>
<td>1-77</td>
<td>0-100</td>
<td>.96</td>
<td>10.52</td>
<td>15.86</td>
<td>11.97$^5,6$</td>
</tr>
<tr>
<td>DES-T</td>
<td>13.46</td>
<td>16.15</td>
<td>0-79</td>
<td>0-100</td>
<td>.87</td>
<td>33.89</td>
<td>15.02</td>
<td></td>
</tr>
<tr>
<td>CTQ total</td>
<td>45.07</td>
<td>19.01</td>
<td>25-107</td>
<td>25-125</td>
<td>.95</td>
<td>18.07</td>
<td>18.53</td>
<td>4</td>
</tr>
<tr>
<td>Emotional abuse</td>
<td>10.79</td>
<td>5.44</td>
<td>5-25</td>
<td>5-25</td>
<td>.89</td>
<td>3.26</td>
<td>5.13</td>
<td>4</td>
</tr>
<tr>
<td>Physical abuse</td>
<td>7.85</td>
<td>4.18</td>
<td>5-25</td>
<td>5-25</td>
<td>.83</td>
<td>2.97</td>
<td>3.81</td>
<td>4</td>
</tr>
<tr>
<td>Sexual abuse</td>
<td>7.74</td>
<td>5.61</td>
<td>5-25</td>
<td>5-25</td>
<td>.96</td>
<td>1.26</td>
<td>5.5</td>
<td>4</td>
</tr>
<tr>
<td>Emotional neglect</td>
<td>11.33</td>
<td>5.25</td>
<td>5-25</td>
<td>5-25</td>
<td>.91</td>
<td>2.48</td>
<td>5.01</td>
<td>4</td>
</tr>
<tr>
<td>Physical neglect</td>
<td>7.36</td>
<td>2.98</td>
<td>5-20</td>
<td>5-25</td>
<td>.68</td>
<td>2.84</td>
<td>2.46</td>
<td>4</td>
</tr>
<tr>
<td>N</td>
<td>25.71</td>
<td>9.16</td>
<td>4-48</td>
<td>0-48</td>
<td>.87</td>
<td>10.94</td>
<td>8.56</td>
<td>17.8$^3$</td>
</tr>
<tr>
<td>E</td>
<td>27.24</td>
<td>7.55</td>
<td>5-42</td>
<td>0-48</td>
<td>.83</td>
<td>9.71</td>
<td>6.89</td>
<td>28.3$^3$</td>
</tr>
<tr>
<td>O</td>
<td>28.64</td>
<td>6.96</td>
<td>12-47</td>
<td>0-48</td>
<td>.76</td>
<td>12.10</td>
<td>6.03</td>
<td>28.7$^3$</td>
</tr>
<tr>
<td>A</td>
<td>31.89</td>
<td>6.27</td>
<td>14-48</td>
<td>0-48</td>
<td>.75</td>
<td>9.67</td>
<td>5.39</td>
<td>32.6$^3$</td>
</tr>
<tr>
<td>C</td>
<td>30.24</td>
<td>8.06</td>
<td>5-48</td>
<td>0-48</td>
<td>.88</td>
<td>7.83</td>
<td>7.58</td>
<td>34.1$^3$</td>
</tr>
<tr>
<td>RS</td>
<td>128.74</td>
<td>19.68</td>
<td>63-175</td>
<td>25-175</td>
<td>.90</td>
<td>34.85</td>
<td>18.77</td>
<td>147.91$^4,7$</td>
</tr>
<tr>
<td>CEQ</td>
<td>9.54</td>
<td>4.62</td>
<td>0-23</td>
<td>0-25</td>
<td>.78</td>
<td>4.70</td>
<td>4.08</td>
<td>4</td>
</tr>
</tbody>
</table>

$^1$ SD$^{-}[1\text{-alpha}]$

$^2$ SD$\times\sqrt{\alpha}$

$^3$ NEO-FFI norms for an Australian adult sample (Murray et al., 2003)

$^4$ No Australian norms are available for the RS, CEQ, CTQ

$^5$ DES Australian norms for a non-clinical sample (Collins, 2004a)

$^6$ Non-Australian norms for both clinical and non-clinical samples available in Carlson and Putnam (1993). These ranged, for example, from 7.8 ($N = 415$) in a general population sample, to 42.8 ($N = 228$) in a sample in which all participants had been diagnosed with multiple personality disorder.

$^7$ Non Australian norms for a community sample of 810 older American adults ($M = 71.1$ years) (Wagnild & Young, 1993).
7.4.2 Factor Analysis: DES

The psychometric properties and factor analysis of the DES were presented in Study 1 using the total sample \((N = 602)\) (see Chapter 6).

7.4.3 Factor Analysis: Childhood Trauma Questionnaire (CTQ)

The aim of the factor analysis was to develop a psychometrically optimal form of the CTQ (D. P. Bernstein & Fink, 1998) that captures the factor structure in the present data. An exploratory factor analysis (EFA) was conducted using both Principal Axis Factoring (PAF) with promax rotation, and Maximum Likelihood (ML) with oblimin rotation extraction methods (see Costello & Osborne, 2005 for explanation of EFA). Both methods were trialled with oblique rotation, as the factors were expected to be correlated.

There were a number of indications that the data were suitable for factor analysis. Inspection of the correlation matrix showed the majority of the coefficients were .3 and above. The KMO measure of sampling adequacy was high (.94) and Bartlett’s test of sphericity was significant \((\chi^2(300) = 5420.534, p<.001)\). Initial communalities ranged from .26 to .91, with the majority greater than .50. The significance level set for factor loadings was .30.

Inspection of the scree plot indicated a clear elbow after the fourth factor, indicating the possibility of four factors. Kaiser’s criterion showed there were also four factors with eigenvalues greater than 1.0, explaining 44.20%, 11.19%, 7.11% and 5.07% of variance in CTQ scores respectively (with a cumulative variance of 67.56%). Velicer’s minimum average partial (MAP) test and parallel analysis were performed and suggested there are a minimum of three factors in the CTQ.

Based on Velicer’s MAP test and parallel analysis, it was decided to test three, four, and five factor solutions to find the most parsimonious fit for the data. Contrary to the findings of Bernstein and Fink (1998), the five factor solutions for both PAF and ML were not as conceptually sound as the three and four factor solutions for both extraction methods. Finally, the four-factor solution using ML with oblimin rotation was chosen. This selection was based on best conceptual fit and on theory. The current DHS categories of child abuse are physical abuse, sexual abuse, emotional abuse (both abuse
and neglect), neglect (physical) (See Chapter 3, Section 3.6.3) (Department of Human Services, 2008) and the four factors aligned with these abuse criteria.

The first factor was made up of 11 items depicting emotional abuse or maltreatment (hereafter called emotional maltreatment to distinguish it from the original emotional abuse/neglect subscales). This factor included the two original CTQ emotional abuse and emotional neglect subscales plus one item from the original physical neglect subscale. Two items cross loaded onto other factors, of which #25 loaded significantly across three of the four factors (see Table 7.4). Factor 2 consisted of the same five sexual abuse items as the original CTQ. Factor 3 comprised the five original CTQ physical abuse items, one of which cross loaded on Factor 4. Factor 4 consisted of four items relating to physical neglect. One of Bernstein and Fink’s (1998) original physical neglect items (#2: I knew there was someone to take care of me and protect me) relocated to Factor 1 as an emotional abuse or maltreatment item. One item (#26) also cross loaded onto Factor 1. A summary of the results of the factor analysis, with factor loadings, eigenvalues and percentages of variance for each of the variables is presented in Table 7.4. The means, standard deviations, observed and theoretical ranges, alphas, error variances, and factor loadings for these four revised childhood trauma subscales are presented in Table 7.3. These subscales were subsequently used in the remaining analyses. As no items were deleted in the revised subscales, the total CTQ scores remained the same.

7.4.4 CTQ Minimisation/Denial Scale

Bernstein and Fink (1998) added a denial scale to the CTQ in order to detect underreporting of trauma. They state that any score from 1 to 3 on the denial scale suggests the possibility of underreporting of maltreatment. Of the total Study 2 sample, 63.8% \((n = 178)\) scored 0 for the denial scale and 29.4% \((n = 82)\) scored 1, making a total of 93.2% who scored low. Of the two age groups, 89.9% of the 17-22 year olds scored 1 and less, compared to 97.5% of the older group (23-67 year olds). Only one person in the study (in the 17-22 year old group) achieved a score of 3, and 6.5% \((n = 18)\) scored 2. Of that 6.5%, 15 were from the 17-22 year old group and three were from the older group (23-67 years). These results suggest there is little likelihood that there is
a problem with under-reporting of trauma, although the younger group scored more 2’s and 3’s than did the older group, indicating perhaps that younger people tended more to minimise or deny maltreatment than did the older group.

### 7.4.5 Intercorrelations

Correlations between the study’s outcome variables, dissociation (DES) and pathological dissociation (DES-T), and the eight predictor variables are presented in Table 7.5. They show that fantasy proneness is the strongest bivariate correlate of both dissociation and pathological dissociation, followed respectively by N, childhood trauma (CTQ total), negative A, and negative Resilience. E and C were also significantly negatively correlated with dissociation. Each of the four CTQ subscales were also significantly correlated with both dissociation and pathological dissociation, with emotional maltreatment the highest, followed by sexual abuse.

Table 7.3

*Means, Standard Deviations, Observed and Theoretical Ranges, Alphas, Error Variances, and Factor Loadings for the Revised Childhood Trauma Questionnaire (N=280)*

<table>
<thead>
<tr>
<th>Variables</th>
<th>M</th>
<th>SD</th>
<th>Observed Range</th>
<th>Theoretical Range</th>
<th>Alpha</th>
<th>Error Variance</th>
<th>Factor loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional maltreatment</td>
<td>23.93</td>
<td>10.86</td>
<td>11-55</td>
<td>11-55</td>
<td>.94</td>
<td>7.09</td>
<td>10.55</td>
</tr>
<tr>
<td>Physical abuse</td>
<td>7.85</td>
<td>4.18</td>
<td>5-25</td>
<td>5-25</td>
<td>.84</td>
<td>2.80</td>
<td>3.83</td>
</tr>
<tr>
<td>Sexual abuse</td>
<td>7.74</td>
<td>5.61</td>
<td>5-25</td>
<td>5-25</td>
<td>.96</td>
<td>1.26</td>
<td>5.5</td>
</tr>
<tr>
<td>Physical neglect</td>
<td>5.55</td>
<td>2.24</td>
<td>4-16</td>
<td>4-20</td>
<td>.64</td>
<td>1.80</td>
<td>1.79</td>
</tr>
</tbody>
</table>

1 SD*[1-alpha]

2 SD*[sqrt alpha]
Table 7.4

*Factor Structure of the Childhood Trauma Questionnaire in the Study 2 Sample*

<table>
<thead>
<tr>
<th>Factor names and Items</th>
<th>Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td><strong>F1 Emotional maltreatment</strong></td>
<td></td>
</tr>
<tr>
<td>19. People in my family felt close to each other</td>
<td>.90</td>
</tr>
<tr>
<td>28. My family was a source of strength and support</td>
<td>.89</td>
</tr>
<tr>
<td>7. I felt loved</td>
<td>.81</td>
</tr>
<tr>
<td>13. People in my family looked out for each other</td>
<td>.81</td>
</tr>
<tr>
<td>5. There was someone in my family who helped me feel that I was important or special</td>
<td>.77</td>
</tr>
<tr>
<td>14. People in my family said hurtful or insulting things to me</td>
<td>.56</td>
</tr>
<tr>
<td>3. People in my family called me things like “stupid,” “lazy,” or “ugly”</td>
<td>.55</td>
</tr>
<tr>
<td>2. I knew there was someone to take care of me and protect me</td>
<td>.50</td>
</tr>
<tr>
<td>18. I felt that someone in my family hated me</td>
<td>.46</td>
</tr>
<tr>
<td>8. I thought my parents wished I had never been born</td>
<td>.46</td>
</tr>
<tr>
<td>25. I believe I was emotionally abused</td>
<td>.42</td>
</tr>
<tr>
<td><strong>F2 Sexual abuse</strong></td>
<td></td>
</tr>
<tr>
<td>24. Someone molested me</td>
<td>-.99</td>
</tr>
<tr>
<td>27. I believe that I was sexually abused</td>
<td>-.97</td>
</tr>
<tr>
<td>20. Someone tried to touch me in a sexual way, or tried to make me touch them</td>
<td>-.93</td>
</tr>
<tr>
<td>23. Someone tried to make me do sexual things or watch sexual things</td>
<td>-.91</td>
</tr>
<tr>
<td>21. Someone threatened to hurt me or tell lies about me unless I did something sexual with them</td>
<td>-.82</td>
</tr>
<tr>
<td><strong>F3 Physical abuse</strong></td>
<td></td>
</tr>
<tr>
<td>11. People in my family hit me so hard it left me with bruises or marks</td>
<td>.74</td>
</tr>
<tr>
<td>15. I believe I was physically abused</td>
<td>.64</td>
</tr>
<tr>
<td>12. I was punished with a belt, a board, a cord, or some other hard object</td>
<td>.59</td>
</tr>
<tr>
<td>17. I got hit or beaten so badly that it was noticed by someone like a teacher, neighbour or doctor</td>
<td>.56</td>
</tr>
<tr>
<td>9. I got hit so hard by someone in my family that I had to see a doctor or go to the hospital</td>
<td>.50</td>
</tr>
<tr>
<td><strong>F4 Physical neglect</strong></td>
<td></td>
</tr>
<tr>
<td>6. I had to wear dirty clothes</td>
<td>.65</td>
</tr>
<tr>
<td>26. There was someone to take me to the doctor if I needed it</td>
<td>.41</td>
</tr>
<tr>
<td>1. I didn’t have enough to eat</td>
<td>.39</td>
</tr>
<tr>
<td>4. My parents were too drunk or high to take care of the family</td>
<td>.26</td>
</tr>
</tbody>
</table>

Eigenvalues                  11.05  2.79  1.78  1.27  
% variance explained         44.20  22.19  7.11  5.07
Table 7.5
Pearson’s Correlations Between Dependent Variable, Dissociation (DES, DES-T, DES20), and Predictor Variables, Childhood Trauma (CTQ) (Total and Revised Subscale), Resilience (RS), Fantasy Proneness (CEQ), and NEO Personality Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>DES</th>
<th>DES-T</th>
<th>DES20</th>
<th>CTQ</th>
<th>RS</th>
<th>CEQ</th>
<th>N</th>
<th>E</th>
<th>O</th>
<th>A</th>
<th>C</th>
<th>Em ab</th>
<th>Phy ab</th>
<th>Sex ab</th>
<th>Phy neg</th>
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<td>-.04</td>
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<td>-.05</td>
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<td>A</td>
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<td>-.35***</td>
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<td>.18***</td>
<td>-.07</td>
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<tr>
<td>Em ab</td>
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<td>.32***</td>
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<tr>
<td>Phy ab</td>
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<td>.24***</td>
<td>.25***</td>
<td>-.23***</td>
<td>.04</td>
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<td>-.01</td>
<td>.68***</td>
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</tr>
<tr>
<td>Sex ab</td>
<td>.31***</td>
<td>.33***</td>
<td>.29***</td>
<td>.73***</td>
<td>-.14*</td>
<td>.22***</td>
<td>.24***</td>
<td>-.29***</td>
<td>-.03</td>
<td>-.07</td>
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<td>.53***</td>
<td>.45***</td>
<td>1.000</td>
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<tr>
<td>Phy neg</td>
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<td>.24***</td>
<td>.62***</td>
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<td>.20***</td>
<td>.22***</td>
<td>-.13***</td>
<td>-.08</td>
<td>-.15*</td>
<td>-.12*</td>
<td>.53***</td>
<td>.49***</td>
<td>.29***</td>
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</tr>
</tbody>
</table>

N = 279; *p < .05, **p < .005, ***p < .001
7.5 Results: Modelling DES

7.5.1 DES: Regression Analysis

A hierarchical regression was conducted to assess whether dissociation as measured by the DES\textsuperscript{9} could be predicted from childhood abuse, the five NEO-FFI personality variables, resilience, and fantasy proneness (see Table 7.6). Childhood abuse was controlled for first, followed by personality, then lastly resilience and fantasy proneness.

Table 7.6
Summary of Hierarchical Regression Analysis for Variables Predicting Dissociation (28-item DES) (N = 279)

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B</th>
<th>β</th>
<th>t</th>
<th>(R^2)</th>
<th>(Δ R^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
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</tr>
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<td>Childhood Abuse</td>
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<td>.38</td>
<td>6.86***</td>
<td>.142</td>
<td>.145***</td>
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<tr>
<td>Step 2</td>
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<td></td>
</tr>
<tr>
<td>Childhood Abuse</td>
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<td>.28</td>
<td>4.73***</td>
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<td>Extraversion</td>
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<td>.07</td>
<td>1.07</td>
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<td></td>
</tr>
<tr>
<td>Openness</td>
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<td>-.04</td>
<td>-.71</td>
<td>-3.58***</td>
<td></td>
</tr>
<tr>
<td>Agreeableness</td>
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<td>-.20</td>
<td>-3.58***</td>
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</tr>
<tr>
<td>Conscientiousness</td>
<td>-.23</td>
<td>-.12</td>
<td>-2.04*</td>
<td>.27</td>
<td>.141***</td>
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<td>Step 3</td>
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<tr>
<td>Childhood Abuse</td>
<td>.15</td>
<td>.17</td>
<td>3.08**</td>
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<tr>
<td>Neuroticism</td>
<td>.14</td>
<td>.08</td>
<td>1.17</td>
<td></td>
<td></td>
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<tr>
<td>Extraversion</td>
<td>.03</td>
<td>.01</td>
<td>.20</td>
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<tr>
<td>Openness</td>
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<td>-2.18*</td>
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<tr>
<td>Agreeableness</td>
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<td>.11</td>
<td>-2.10*</td>
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<td></td>
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<tr>
<td>Conscientiousness</td>
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<td>.07</td>
<td>-1.29</td>
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<tr>
<td>Resilience</td>
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<td>.14</td>
<td>-1.89</td>
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<td>Fantasy proneness</td>
<td>1.39</td>
<td>.40</td>
<td>7.09***</td>
<td>.381</td>
<td>.113***</td>
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</tbody>
</table>

Note: \(B\) = Unstandardised Beta Coefficient; \(\beta\) = Standardised Beta Coefficient; \(R^2\) = adjusted R square, \(Δ R^2\) = R square change. 
*p<.05, **p <.005, ***p <.001

\textsuperscript{9} Analyses, including SEM, were also conducted with the 20-item dissociation scale (DES20), which is purported to measure normal dissociation as opposed to the 8-item DES-T, which is thought to measure pathological dissociation. The final models for the DES20 (see Appendix D.2) showed that, unlike the results for the 28-item DES, the CTQ total scale (childhood trauma) was not a direct significant predictor. However, the sexual abuse subscale was a direct predictor (\(\beta = .14\)) as it was for the 28-item DES (\(\beta = .16\)). Other pathways for both scales were similar with the exception of physical neglect in which there was an added pathway from A to dissociation. Therefore, it was considered unnecessary to report the results for the DES20 in full, and when dissociation is referred to, it is the 28-item DES unless otherwise stated.
In the first step, childhood abuse (total CTQ scores) predicted 14.5% of the variance in DES scores, \( F(1, 277) = 47.03, p < .001 \). When the five personality variables (N, E, O, A, C) were added in Step 2, they explained a further 14.1% of the variance in DES scores, \( F(5, 272) = 10.73, p < .001 \). At Step 2, the strongest predictor of dissociation was childhood abuse followed by N and then negative A. Negative C was also a predictor of dissociation at this level.

In step 3, fantasy proneness and resilience were added and accounted for a further 11.3% of the variance in DES scores, \( F(2, 270) = 25.40, p < .001 \). At this stage, fantasy proneness became the strongest predictor of DES scores, followed by childhood abuse. Interestingly, at Step 3, N was no longer a significant predictor of dissociation scores, and negative O, perhaps because of its relationship with fantasy proneness and resilience (see Table 7.5), became a significant negative predictor of dissociation. A also remained a significant negative predictor. Therefore, according to step 3, participants who reported experiencing more distressing dissociative symptoms also reported more extreme childhood trauma, more fantasy proneness, and lower levels of A and O.

**Post Hoc Analyses:** The unexpected negative association between dissociation and A was pursued in post hoc analyses\(^\text{10}\).

### 7.5.2 DES: SEM analyses

As a starting point for SEM analyses, the significant pathways suggested by preceding correlational and regression analyses (see Tables 7.5 and 7.6) were used to develop a structural model using five predictors of dissociation: childhood trauma, neuroticism, agreeableness, fantasy proneness, and resilience (see Figure 7.2).

\(^\text{10}\) Post hoc analyses are presented in Appendix D.3
**Figure 7.2.** Model 0 showing the pathways generated from the suggested correlations and hierarchical regressions for the predictors of dissociation.

As summarised in the fit indices in Table 7.7, this strategy generated a poor fitting model (Model 0). There were four non-significant paths: (a) N to Fantasy proneness; (b) Childhood Trauma to Resilience; (c) N to Dissociation; and (d) from A to resilience. Modification indices also indicated that the relationship between Fantasy Proneness and Resilience was not adequately explained. When these pathways were addressed, Model 1 was a good fit and AIC fit indices (Akaike Information Criterion, a measure of model parsimony) reduced from 73.08 to 54.24, also indicating a better fitting model. However, modification indices in Model 1 suggested adding a path from A to resilience.

When the path from A to resilience was added, the resultant Model 2 was a better fit than Model 1 (see Table 7.7), and the AIC was 51.99. One path was non-significant, i.e., from A to dissociation. When this was removed, the resultant Model 3 was also a good fit, but the AIC indices increased to 53.49. The chi-square difference between Model 2 and Model 3 was not significant ($\chi^2(1) = 3.50, p > .05$). Therefore, Model 2 (Figure 7.3), as the more parsimonious of the two models, was accepted as the final model and the pathways generated in this model were also used as the starting point for all other SEM analyses predicting dissociation (DES) in Study 2.
Figure 7.3. Model 2: The final model for the total sample showing childhood trauma, personality, fantasy proneness, and resilience as predictors of dissociation.

Table 7.7
Fit Indices for the Structural Equation Models for Dependent Variable Dissociation and Independent Variables Childhood Trauma, Personality, Fantasy Proneness, and Resilience (N = 279)

<table>
<thead>
<tr>
<th>Model</th>
<th>Model Description</th>
<th>$\chi^2$</th>
<th>d.f.</th>
<th>Sig.</th>
<th>$\chi^2$/df</th>
<th>RMSEA</th>
<th>SRMR</th>
<th>CFI</th>
<th>TLI</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Model based on correlation and regression results</td>
<td>21.08</td>
<td>1</td>
<td>&lt;.001</td>
<td>21.08</td>
<td>.27</td>
<td>.04</td>
<td>.95</td>
<td>.26</td>
</tr>
<tr>
<td>1</td>
<td>Model based above model with MI’s addressed and ns paths removed</td>
<td>8.24</td>
<td>4</td>
<td>.08</td>
<td>2.06</td>
<td>.06</td>
<td>.03</td>
<td>.99</td>
<td>.96</td>
</tr>
<tr>
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<td>Based on above model with MI’s addressed</td>
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<td>.035</td>
<td>.025</td>
<td>.998</td>
<td>.99</td>
</tr>
<tr>
<td>3</td>
<td>Based on above model with ns path removed</td>
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<td>.06</td>
<td>.03</td>
<td>.99</td>
<td>.97</td>
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</table>
7.6 Results: Modelling DES-T

7.6.1 DES-T: Regression Analysis

A further hierarchical regression was conducted to assess whether pathological dissociation (DES-T) could also be predicted from childhood abuse, the five NEO personality variables, resilience, and fantasy proneness. Childhood abuse was controlled for first, followed by personality, then lastly resilience and fantasy proneness were introduced to the analysis (see Table 7.8).

Table 7.8
Summary of Hierarchical Regression Analysis for Variables Predicting Pathological Dissociation (8-item DES-T) (N = 279)

<table>
<thead>
<tr>
<th>Predictor</th>
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<th>β</th>
<th>t</th>
<th>R²</th>
<th>Δ R²</th>
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<td>5.23***</td>
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<td>3.44**</td>
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<td>.02</td>
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<td>-.04</td>
<td>-.71</td>
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<td>.104***</td>
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<tr>
<td>Childhood Abuse</td>
<td>.18</td>
<td>.21</td>
<td>3.76***</td>
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<tr>
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<td>.07</td>
<td>.96</td>
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<td>-.08</td>
<td>-1.42</td>
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<td>-.04</td>
<td>-.62</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resilience</td>
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<td>-.16</td>
<td>-2.09*</td>
<td>.352</td>
<td>.094***</td>
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<td>6.25***</td>
<td>.352</td>
<td>.094***</td>
</tr>
</tbody>
</table>

Note: B = Unstandardised Beta Coefficient; β = Standardised Beta Coefficient; R² = adjusted R square, Δ R² = R square change.

* p < .05, ** p < .005, *** p < .001

In the first step, childhood abuse (total CTQ scores) predicted 17.3% of the variance in DES-T scores, F(1,277) = 57.98, p < .001. When the five personality variables (N, E, O, A, C) were added in Step 2, they explained a further 10.4% of the variance in DES-T scores, F(5, 272) = 17.39, p < .001. At Step 2, the strongest predictor of dissociation was childhood abuse followed by N and then A. In Step 3, fantasy proneness and resilience were added and accounted for a further 9.4% of the variance in
DES-T scores, \( F(2, 270) = 19.91, p < .001 \). At this stage, fantasy proneness was the strongest predictor of DES-T scores, followed by childhood abuse. Interestingly, this time in Step 3, no personality variables were significant predictors of pathological dissociation. Instead, resilience was a significant negative predictor of pathological dissociation.

7.6.2 DES-T: SEM Analyses

The descriptives of the six predictor variables and the dependent variable, pathological dissociation, are presented in Table 7.2. In similar manner to the DES initial Model 0 (Figure 7.2), the significant pathways suggested by prior correlational and regression analyses (see Tables 7.5 and 7.8) were used to test a structural model predicting pathological dissociation from childhood trauma, neuroticism, agreeableness, fantasy proneness, and resilience as independent variables (see Appendix D.1).

As summarised in the fit indices for the DES-T in Table 7.9, this strategy generated a poor fitting model. There were five non-significant paths: (a) A to resilience; (b) N to Fantasy proneness; (c) Childhood Trauma to Resilience; (d) A to pathological dissociation; and (e) N to pathological dissociation. Again, modification indices also indicated that the relationship between Fantasy Proneness and Resilience was not adequately explained. When these pathways were addressed, the resulting Model 1 was a good fit and AIC fit indices reduced from 73.08 to 54.05, also indicating a better fitting model. However, modification indices in Model 1 again suggested adding a path from A to resilience. When the path from A to resilience was added, the resultant Model 2 was a better fit than Model 1 (see Table 7.9), and the AIC was 51.30. Therefore, Model 2 (Figure 7.4) was accepted as the final model because it was the more parsimonious of the models.

As shown in Figures 7.3 and 7.4, there is little difference between the models for the DES and DES-T. All pathways were the same, with fantasy proneness the strongest predictor of both dissociation and pathological dissociation. Childhood abuse was also a significant predictor for both, albeit a stronger predictor for pathological dissociation. One subtle difference was that resilience was a stronger negative predictor for pathological dissociation.
Figure 7.4. Model 2: The final model for the total sample showing childhood trauma, personality, fantasy proneness, and resilience as predictors of pathological dissociation.

Table 7.9
Fit Indices for the Structural Equation Models for Dependent Variable Pathological Dissociation and Independent Variables Childhood Trauma, Personality, Fantasy Proneness, and Resilience (N = 279)

<table>
<thead>
<tr>
<th>Model</th>
<th>Model Description</th>
<th>χ²</th>
<th>d.f.</th>
<th>Sig.</th>
<th>χ²/df</th>
<th>RMSEA</th>
<th>SRMR</th>
<th>CFI</th>
<th>TLI</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Model based on correlation and regression results</td>
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<td>1</td>
<td>Model based above model with MI’s addressed and ns paths removed</td>
<td>10.05</td>
<td>5</td>
<td>.07</td>
<td>2.01</td>
<td>.06</td>
<td>.03</td>
<td>.987</td>
<td>.962</td>
</tr>
<tr>
<td>2</td>
<td>Based on above model with MI’s addressed</td>
<td>5.30</td>
<td>4</td>
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<td>1.33</td>
<td>.03</td>
<td>.03</td>
<td>.997</td>
<td>.988</td>
</tr>
</tbody>
</table>

7.7 Results: Modelling DES and DES-T: CTQ Sexual Abuse Subscale

All CTQ subscales were examined using regressions and SEM analyses. The resulting SEM models for emotional maltreatment, physical abuse and physical neglect are presented in Appendix D.1. The pattern of results was the same for all three
constructs. Emotional maltreatment, physical abuse and physical neglect were all direct predictors of the 8-item DES-T (pathological dissociation) but not the 28-item DES. This pattern was different for sexual abuse, which was a direct predictor of both the DES-T and the DES. The CTQ sexual abuse results are presented here.

7.7.1 Regressions for DES and DES-T: CTQ Sexual Abuse Subscale

(i) 28-item DES: Correlations suggested that all four CTQ revised subscales (emotional maltreatment, sexual abuse, physical abuse and physical neglect) were significantly related to higher dissociation scores (see Table 7.5). To further investigate these findings, hierarchical regressions were conducted to assess which, if any, of the four childhood trauma subscales predicted dissociation (See Table 7.10).

In Step 1, sexual abuse was the strongest predictor of dissociation, followed by emotional maltreatment. Together they predicted 14.9% of the variance in DES scores, $F(4,274) = 11.98, p < .001$. When the five personality variables (N, E, O, A, C) were added in Step 2, they explained a further 14.6% of the variance in DES scores, $F(9,269) = 11.13, p < .001$. In this step, N became the strongest predictor of dissociation scores, with negative A, sexual abuse, and negative C also being significant predictors in that order. In Step 3, fantasy proneness and resilience were again added and accounted for a further 11.2% of variance in dissociation scores, $F(11,267) = 16.63, p < .001$. Fantasy proneness became the strongest predictor of dissociation scores, followed by sexual abuse. N was no longer a significant predictor of dissociation scores at Step 3, while negative A remained a significant predictor, and negative O also became significant, again perhaps because of its relationship to fantasy proneness and resilience.

(ii) 8-item DES-T: The same predictors were used in a hierarchical regression with pathological dissociation (DES-T) as the dependent variable. See Table 7.11 for the hierarchical regression showing the independent variables: the four childhood trauma subscales, personality, resilience and fantasy proneness.

In Step 1, this time, in contrast to the hierarchical regression for the DES, emotional maltreatment was the strongest predictor of pathological dissociation, followed by sexual abuse. Together they predicted 17.8% of the variance in DES-T scores, $F(4,274) = 14.81, p < .001$. When the five personality variables (N, E, O, A, C) were added in Step 2, they explained a further 10.6% of the variance in DES-T scores, $F(5,269) = 11.86, p < .001$. In this step, N became the strongest predictor of
pathological dissociation, with sexual abuse, and negative A also being significant predictors.

In Step 3, fantasy proneness and resilience were again added and accounted for a further 9.3% of variance in dissociation scores, $F(2,267) = 14.67, p < .001$. Fantasy proneness became the strongest predictor of pathological dissociation scores, followed by sexual abuse. Similar to the first regression, N was no longer a significant predictor of dissociation scores at Step 3, however, neither were A or O. Of interest is the fact that resilience became a significant predictor at this stage.

Table 7.10

Summary of Hierarchical Regression Analysis for Variables Predicting Dissociation (28-item DES) including the Four Revised CTQ subscales Replacing the CTQ Total Scale (N = 279)

<table>
<thead>
<tr>
<th>Predictor</th>
<th>$B$</th>
<th>$\beta$</th>
<th>$t$</th>
<th>$R^2$</th>
<th>$\Delta R^2$</th>
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</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Em maltreatment (r)</td>
<td>.27</td>
<td>.18</td>
<td>2.12*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical abuse</td>
<td>.18</td>
<td>.05</td>
<td>.58</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sexual abuse</td>
<td>.49</td>
<td>.17</td>
<td>2.56**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical neglect (r)</td>
<td>.61</td>
<td>.08</td>
<td>1.24</td>
<td>.136</td>
<td>.149***</td>
</tr>
<tr>
<td>Step 2</td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Em maltreatment (r)</td>
<td>.10</td>
<td>.07</td>
<td>.81</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical abuse</td>
<td>.20</td>
<td>.05</td>
<td>.71</td>
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<td></td>
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<tr>
<td>Sexual abuse</td>
<td>.54</td>
<td>.19</td>
<td>3.03**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical neglect (r)</td>
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<td>.04</td>
<td>.70</td>
<td></td>
<td></td>
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<tr>
<td>Neuroticism</td>
<td>.43</td>
<td>.24</td>
<td>3.81***</td>
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<td>Extraversion</td>
<td>.14</td>
<td>.06</td>
<td>1.03</td>
<td></td>
<td></td>
</tr>
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<td>Agreeableness</td>
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<td>-2.12*</td>
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<td>.146***</td>
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<td>.004</td>
<td>.05</td>
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<tr>
<td>Sexual abuse</td>
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<td>.15</td>
<td>2.55*</td>
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<td></td>
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<tr>
<td>Physical neglect (r)</td>
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<td>.60</td>
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<td>Neuroticism</td>
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<td>1.33</td>
<td></td>
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<tr>
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<td>.01</td>
<td>.13</td>
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<td>Resilience</td>
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<td>-.14</td>
<td>-1.84</td>
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<tr>
<td>Fantasy proneness</td>
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<td>.40</td>
<td>7.06***</td>
<td>.407</td>
<td>.112***</td>
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</tbody>
</table>

Note: $B = \text{Unstandardised Beta Coefficient}; \beta = \text{Standardised Beta Coefficient}; R^2 = \text{adjusted R square}, \Delta R^2 = \text{R square change}.
(r) Denotes the revised subscale derived from the factor analysis conducted on the CTQ.
*p < .05, **p < .005, ***p < .001
Table 7.11
Summary of Hierarchical Regression Analysis for Variables Predicting Pathological Dissociation (8-item DES-T) with the Four Revised CTQ subscales replacing the CTQ Total Scale (N = 279)

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B</th>
<th>β</th>
<th>t</th>
<th>R²</th>
<th>Δ R²</th>
</tr>
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<td><strong>Step 1</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Em maltreatment (r)</td>
<td>.37</td>
<td>.25</td>
<td>2.99*</td>
<td></td>
<td></td>
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<tr>
<td>Physical abuse</td>
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<td>.01</td>
<td>.14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sexual abuse</td>
<td>.51</td>
<td>.18</td>
<td>2.70*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical neglect (r)</td>
<td>.53</td>
<td>.07</td>
<td>1.10</td>
<td>.166</td>
<td>.178***</td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
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<td></td>
</tr>
<tr>
<td>Em maltreatment (r)</td>
<td>.20</td>
<td>.14</td>
<td>1.56</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical abuse</td>
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<td>.02</td>
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<td></td>
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<td>2.96*</td>
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<td>Physical neglect (r)</td>
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<td>Agreeableness</td>
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<td>-.16</td>
<td>-2.84**</td>
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<td>.08</td>
<td>.98</td>
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<td>Physical abuse</td>
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<td>.01</td>
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<tr>
<td>Sexual abuse</td>
<td>.43</td>
<td>.15</td>
<td>2.54*</td>
<td></td>
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</tr>
<tr>
<td>Physical neglect (r)</td>
<td>.27</td>
<td>.04</td>
<td>.62</td>
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<tr>
<td>Neuroticism</td>
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<tr>
<td>Extraversion</td>
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<tr>
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<td>-1.51</td>
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<tr>
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<tr>
<td>Resilience</td>
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<td>-.16</td>
<td>-2.13*</td>
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<td></td>
</tr>
<tr>
<td>Fantasy proneness</td>
<td>1.24</td>
<td>.40</td>
<td>6.17***</td>
<td>.351</td>
<td>.093***</td>
</tr>
</tbody>
</table>

Note: B = Unstandardised Beta Coefficient; β = Standardised Beta Coefficient; R² = adjusted R square, Δ R² = R square change.
(r) Denotes the revised subscale derived from the factor analysis conducted on the CTQ.
*p < .05, **p < .005, ***p < .001

### 7.7.2 SEM for DES and DES-T: CTQ Sexual Abuse Subscale

(i) 28-item DES: The starting model for these analyses (the final model, Figure 7.3, with the addition of pathway N to fantasy proneness) generated a poor fitting model (see Table 7.12). There was one non-significant path: sexual abuse to A. When this path was removed, the resulting model was a satisfactory fit, although still overidentified. As all pathways were significant and there was no theoretical reason to remove other paths, this Model 1 was accepted as the final model (see Figure 7.5). According to Kline (2005), this is acceptable practice and still indicates that the model is an adequate fit for the data.
Figure 7.5. Model 1: The final model for the total sample showing sexual abuse, personality, fantasy proneness, and resilience as predictors of dissociation.

Figure 7.6. Model 1: The final model for the total sample showing sexual abuse, personality, fantasy proneness, and resilience as predictors of pathological dissociation.
(ii) The 8-item DES-T: The starting model (Figure 7.4, with the addition of pathway N to fantasy proneness) was again a poor fitting model (see Table 7.12) with two nonsignificant pathways: (a) A to pathological dissociation; and (b) sexual abuse to A. When these were attended to, the Model was again overspecified, but was accepted as the final model (Figure 7.6, above). As can be seen in both models, sexual abuse predicts both dissociation and pathological dissociation, and in both models the pathways are essentially the same. Once again, fantasy proneness is still the strongest predictor of both the DES and DES-T, with sexual abuse also predicting both variables.

Table 7.12

**Fit Indices for SEM of Sexual Abuse, Personality (N and A), Resilience, and Fantasy Proneness Predicting Dissociation and Pathological Dissociation.**

<table>
<thead>
<tr>
<th>CTQ subscale</th>
<th>Model</th>
<th>Model Description</th>
<th>χ²</th>
<th>d.f.</th>
<th>Sig.</th>
<th>χ²/df</th>
<th>RMSEA</th>
<th>SRMR</th>
<th>CFI</th>
<th>TLI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sexual abuse</td>
<td>0</td>
<td>Pathways based on final model 2</td>
<td>.05</td>
<td>2</td>
<td>.98</td>
<td>.023</td>
<td>.00</td>
<td>.002</td>
<td>1.00</td>
<td>1.040</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Based on above model with ns path removed</td>
<td>1.32</td>
<td>3</td>
<td>.72</td>
<td>.441</td>
<td>.00</td>
<td>.018</td>
<td>1.00</td>
<td>1.023</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CTQ subscale</th>
<th>Model</th>
<th>Model Description</th>
<th>χ²</th>
<th>d.f.</th>
<th>Sig.</th>
<th>χ²/df</th>
<th>RMSEA</th>
<th>SRMR</th>
<th>CFI</th>
<th>TLI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sexual abuse</td>
<td>0</td>
<td>Pathways based on final model 2</td>
<td>.05</td>
<td>2</td>
<td>.98</td>
<td>.023</td>
<td>.00</td>
<td>.002</td>
<td>1.00</td>
<td>1.040</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Based on above model with ns path removed</td>
<td>1.32</td>
<td>3</td>
<td>.72</td>
<td>.441</td>
<td>.00</td>
<td>.018</td>
<td>1.00</td>
<td>1.023</td>
</tr>
</tbody>
</table>

### 7.8 Results: Exploration of Age Differences

Means and standard deviations for the two age groups for dissociation, childhood trauma, fantasy proneness and resilience scores are presented in Table 7.13.

One-way between-groups analyses of variance (ANOVAs) were conducted to explore the impact of age on levels of reported dissociation (DES), childhood abuse (CTQ), fantasy proneness (CEQ), and resilience (RS). Participants were divided into two groups (Group 1: 17-22 years, and Group 2: 23-67 years).

Results showed there was no statistically significant difference in dissociation, fantasy proneness or resilience scores between the two groups although there was a
tendency for the younger group’s scores to be higher than the older group’s scores for dissociation and fantasy proneness, but lower for resilience.

However, there was a statistically significant difference at the $p < .001$ level in reported childhood abuse between the two groups, $F(1, 277) = 44.45, p < .001$, partial eta squared = .14. Those who were older reported significantly more childhood abuse than did the younger group, which is consistent with CTQ denial scale results.

Table 7.13
*Means and Standard Deviations for the 17-22 Years and 23-67 Years Age Groups for Dissociation, Personality, Childhood Trauma, Fantasy Proneness and Resilience Scores*

<table>
<thead>
<tr>
<th>Variable</th>
<th>17-22 years</th>
<th>23-67 years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Dissociation</td>
<td>20.88</td>
<td>15.29</td>
</tr>
<tr>
<td>Childhood trauma</td>
<td>38.89</td>
<td>13.83</td>
</tr>
<tr>
<td>N</td>
<td>25.47</td>
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<tr>
<td>E</td>
<td>29.15</td>
<td>7.13</td>
</tr>
<tr>
<td>0</td>
<td>27.47</td>
<td>7.05</td>
</tr>
<tr>
<td>A</td>
<td>31.09</td>
<td>6.44</td>
</tr>
<tr>
<td>C</td>
<td>28.64</td>
<td>7.54</td>
</tr>
<tr>
<td>Fantasy proneness</td>
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<td>4.66</td>
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<tr>
<td>Resilience</td>
<td>128.51</td>
<td>17.88</td>
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</table>

Pearson’s correlations between the predictor and dependent variables for the younger and older age groups are shown in Tables 7.14 and 7.15 respectively. These analyses show that, for the older group, childhood trauma, fantasy proneness, N and negative A are the significant bivariate correlates. For the younger group, all predictors except O are significantly correlated with dissociation (positively with childhood trauma, fantasy proneness, and N, and negatively with resilience, E, A, and C).
Table 7.14

Pearson’s Correlations Between Dependent Variable, Dissociation, and Predictor Variables, Childhood Trauma, Resilience, Fantasy Proneness, and NEO Personality Variables for the Younger Group, 17-22 Years (N = 158)

<table>
<thead>
<tr>
<th>Variables</th>
<th>DES</th>
<th>CTQ</th>
<th>Resilience</th>
<th>Fantasy</th>
<th>N</th>
<th>E</th>
<th>O</th>
<th>A</th>
<th>C</th>
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</thead>
<tbody>
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<td></td>
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<tr>
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<td></td>
</tr>
<tr>
<td>Resilience</td>
<td>- .46***</td>
<td>-.26**</td>
<td>1.000</td>
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</tr>
<tr>
<td>Fantasy</td>
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<td>.39***</td>
<td>.06</td>
<td>1.000</td>
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<tr>
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<td>E</td>
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<td>-.34***</td>
<td>.59***</td>
<td>-.13</td>
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<td>1.000</td>
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<td></td>
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</tr>
<tr>
<td>O</td>
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<td>.22*</td>
<td>.14</td>
<td>-.09</td>
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<tr>
<td>A</td>
<td>-.41***</td>
<td>-.15</td>
<td>.26**</td>
<td>-.37***</td>
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<td>C</td>
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<td>.36***</td>
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</tr>
</tbody>
</table>

*p < .05, **p < .005, ***p < .001

Table 7.15

Pearson’s Correlations Between Dependent Variable, Dissociation, and Predictor Variables, Childhood Trauma, Resilience, Fantasy Proneness, and NEO Personality Variables for the Older Group, 23-67 Years (N=121)

<table>
<thead>
<tr>
<th>Variables</th>
<th>DES</th>
<th>CTQ</th>
<th>Resilience</th>
<th>Fantasy</th>
<th>N</th>
<th>E</th>
<th>O</th>
<th>A</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>DES</td>
<td>1.000</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>CTQ total</td>
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<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resilience</td>
<td>-.16</td>
<td>-.29***</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fantasy</td>
<td>.54***</td>
<td>.35***</td>
<td>.01</td>
<td>1.000</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>.32***</td>
<td>.32***</td>
<td>-.54***</td>
<td>.31***</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>-.15</td>
<td>-.32***</td>
<td>.49***</td>
<td>.01</td>
<td>-.37***</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>O</td>
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<td>.06</td>
<td>.28***</td>
<td>.05</td>
<td>-.06</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>-.29***</td>
<td>-.36***</td>
<td>.24**</td>
<td>-.22**</td>
<td>-.30***</td>
<td>.31***</td>
<td>.02</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>-.16</td>
<td>-.24**</td>
<td>.43***</td>
<td>-.10</td>
<td>-.21**</td>
<td>.17*</td>
<td>-.18*</td>
<td>.30***</td>
<td>1.000</td>
</tr>
</tbody>
</table>

*p < .05, **p < .005, ***p < .001

7.8.1 Regressions: Age Group Differences

Hierarchical regressions for the age groups were conducted using the same variables and steps as for previous regressions with the DES as dependent variable and the CTQ total scale for childhood abuse. See Tables 7.16 and 7.17 for results of regressions for both age groups.

As can be seen, in Step 1 of both regressions, childhood abuse accounted for 18.5% of variance in dissociation scores for the younger group, $F(1,156) = 35.33$, $p <$
.001, and 20.6% for the older age group, $F(1,119) = 30.84, p < .001$. In Step 2, with the addition of the personality variables, N, E, O, A, and C, childhood trauma was still a significant predictor for both groups, but more so for the younger group. Negative A remained significant for the older group and N for the younger group. However, while for the older group, the addition of the personality variables accounted for 18.5% of the variance, $F(5,144) = 6.91, p < .001$, for the younger group this addition accounted for only 5.4% of the variance, $F(5,151) = 2.16, p > .05$.

Table 7.16

*Summary of Hierarchical Regression Analysis for Variables Predicting Dissociation (28-item DES) for Younger Age Group 17-22 Years (N = 158)*

<table>
<thead>
<tr>
<th>Predictor</th>
<th>$B$</th>
<th>$\beta$</th>
<th>$t$</th>
<th>$R^2$</th>
<th>$\Delta R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Childhood Trauma</td>
<td>.48</td>
<td>.43</td>
<td>5.94</td>
<td>.179</td>
<td>.185**</td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Childhood Trauma</td>
<td>.39</td>
<td>.34</td>
<td>4.27</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neuroticism</td>
<td>.37</td>
<td>.20</td>
<td>2.52</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extraversion</td>
<td>.18</td>
<td>.08</td>
<td>1.03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Openness</td>
<td>.03</td>
<td>-.02</td>
<td>.21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agreeableness</td>
<td>-.31</td>
<td>-.13</td>
<td>-1.62</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>-.01</td>
<td>-.00</td>
<td>-.06</td>
<td></td>
<td>.209 .054</td>
</tr>
<tr>
<td><strong>Step 3</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Childhood Trauma</td>
<td>.23</td>
<td>.21</td>
<td>2.73</td>
<td>.98</td>
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</tr>
<tr>
<td>Neuroticism</td>
<td>.15</td>
<td>.08</td>
<td>.98</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extraversion</td>
<td>-.06</td>
<td>.03</td>
<td>-.33</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Openness</td>
<td>-.24</td>
<td>-.11</td>
<td>-1.60</td>
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<td></td>
</tr>
<tr>
<td>Agreeableness</td>
<td>-.16</td>
<td>-.07</td>
<td>-.93</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>-.07</td>
<td>-.04</td>
<td>-.47</td>
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</tr>
<tr>
<td>Resilience</td>
<td>-.004</td>
<td>-.01</td>
<td>-.06</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fantasy proneness</td>
<td>1.48</td>
<td>.45</td>
<td>5.81</td>
<td>.350</td>
<td>.144***</td>
</tr>
</tbody>
</table>

Note: $B =$ Unstandardised Beta Coefficient; $\beta =$ Standardised Beta Coefficient; $R^2 =$ adjusted R square, $\Delta R^2 =$ R square change.

*p < .05, **p < .005, ***p < .001*

In Step 3, with the addition of resilience and fantasy proneness, childhood abuse again remained a significant predictor of dissociation scores for both groups. However, no personality variables remained significant predictors for either group. Instead, for both groups fantasy proneness became the strongest predictor of dissociation, and for the older group, negative resilience was also a significant predictor. The addition of fantasy proneness in Step 3 accounted for 7.1% of the variance in dissociation scores for
the older group, $F(2, 112) = 7.38, p < .005$, and 14.4% for the younger group $F(2,149) = 17.38, p < .001$.

Table 7.17

*Summary of Hierarchical Regression Analysis for Variables Predicting Dissociation (28-item DES) for Older Age Group 23-67 Years (N = 121)*

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B</th>
<th>β</th>
<th>t</th>
<th>$R^2$</th>
<th>$\Delta R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Childhood Trauma</td>
<td>.36</td>
<td>.45</td>
<td>5.55***</td>
<td>.199</td>
<td>.206***</td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
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<td></td>
</tr>
<tr>
<td>Childhood Trauma</td>
<td>.23</td>
<td>.29</td>
<td>3.38**</td>
<td></td>
<td></td>
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<tr>
<td>Neuroticism</td>
<td>.33</td>
<td>.19</td>
<td>1.88</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extraversion</td>
<td>-.08</td>
<td>-.04</td>
<td>-.40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Openness</td>
<td>-.10</td>
<td>-.04</td>
<td>-.49</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agreeableness</td>
<td>-.73</td>
<td>-.24</td>
<td>-3.03**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>-.29</td>
<td>-.14</td>
<td>-1.60</td>
<td>.360</td>
<td>.185***</td>
</tr>
<tr>
<td><strong>Step 3</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Childhood Trauma</td>
<td>.18</td>
<td>.23</td>
<td>2.61**</td>
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<tr>
<td>Neuroticism</td>
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<td>.01</td>
<td>.11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extraversion</td>
<td>.02</td>
<td>.01</td>
<td>.09</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Openness</td>
<td>-.12</td>
<td>-.05</td>
<td>-.58</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agreeableness</td>
<td>-.48</td>
<td>-.16</td>
<td>-1.98</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>-.12</td>
<td>-.06</td>
<td>-.63</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resilience</td>
<td>-.24</td>
<td>-.30</td>
<td>-2.46*</td>
<td>.423</td>
<td>.071**</td>
</tr>
<tr>
<td>Fantasy proneness</td>
<td>1.06</td>
<td>.28</td>
<td>3.31**</td>
<td>.423</td>
<td>.071**</td>
</tr>
</tbody>
</table>

Note: $B =$ Unstandardised Beta Coefficient; $\beta =$ Standardised Beta Coefficient; $R^2 =$ adjusted R square, $\Delta R^2 =$ R square change.

* $p < .05$, ** $p < .005$, *** $p < .001$

Therefore, in the older group, participants who reported more childhood trauma, who were more fantasy prone, and who were less resilient were more likely to be more dissociative. However, individuals in the younger group were more dissociative only if they reported more childhood abuse and more fantasy proneness. Resilience was not a significant predictor. Because of these interesting differences it was decided to conduct SEM analyses to examine more closely the differences in the predictors of dissociation between the age groups.
7.8.2 Structural Equation Modelling: Age Group Differences

7.8.2.1. The younger group (17-22 years).

The final model (Figure 7.3, with the addition of pathway N to fantasy proneness) from the total sample was used as a starting point for the younger group, but was not a good fit (see Table 7.18). There were four non-significant paths: (a) A to fantasy proneness; (b) A to resilience; (c) resilience to dissociation; and (d) A to dissociation. In addition, modification indices suggested adding a path from N to fantasy proneness. After addressing these issues, the resultant Model 1 was still not a good fit and modification indices suggested placing a path from childhood trauma to resilience. Once this pathway was added, Model 2 (Figure 7.7), while over-specified, was the most parsimonious of the three models.

![Figure 7.7. Model 2: The final model for predictors of dissociation for the younger group.](image-url)
Table 7.18

*Fit Indices for SEM of Childhood Trauma, Personality, Resilience, and Fantasy Proneness Predicting Dissociation for Younger Group, 17 – 22 years (n = 158)*

<table>
<thead>
<tr>
<th>Model</th>
<th>Model Description</th>
<th>(\chi^2)</th>
<th>d.f.</th>
<th>Sig.</th>
<th>(\chi^2/df)</th>
<th>RMSEA</th>
<th>SRMR</th>
<th>CFI</th>
<th>TLI</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Model based on final model for whole sample</td>
<td>11.13</td>
<td>3</td>
<td>.01</td>
<td>3.71</td>
<td>.13</td>
<td>.05</td>
<td>.96</td>
<td>.80</td>
</tr>
<tr>
<td>1</td>
<td>Model based on final model for whole sample, with ns paths removed and MI’s addressed</td>
<td>11.95</td>
<td>6</td>
<td>.06</td>
<td>1.99</td>
<td>.08</td>
<td>.05</td>
<td>.97</td>
<td>.93</td>
</tr>
<tr>
<td>2</td>
<td>Model based on above model with MI’s addressed</td>
<td>4.65</td>
<td>5</td>
<td>.46</td>
<td>.93</td>
<td>.000</td>
<td>.03</td>
<td>1.00</td>
<td>1.005</td>
</tr>
</tbody>
</table>

7.8.2.2. *The older group (23-67 years).*

Using the most parsimonious model from the total sample model process as a starting model (Figure 7.3, with the addition of the pathway from N to fantasy proneness), it can be seen from the fit indices in Table 7.19 that Model 0 was over-specified and lacked parsimony. There were three non-significant paths: (a) childhood trauma to A; (b) A to resilience; and (c) A to dissociation. When these were removed the resultant Model 1 was not a good fit (see Table 7.19). In Model 1, the path from childhood trauma to dissociation became non-significant and modification indices suggested a new pathway from dissociation to A. When these were attended to, the fit indices indicated an acceptable fit for Model 2. However, the path from A to N was non-significant and modification indices suggested that the pathway from childhood trauma to dissociation be reinstated. The resultant Model 3 was a good fit and was the most parsimonious model.
Figure 7.8. Model 3: The final model for predictors of dissociation for the older group.

Table 7.19

Fit Indices for SEM of Childhood Trauma, Personality, Resilience, and Fantasy Proneness Predicting Dissociation for Older Group, 23 - 67 years (n = 121)

<table>
<thead>
<tr>
<th>Model</th>
<th>Model Description</th>
<th>$\chi^2$</th>
<th>d.f.</th>
<th>Sig.</th>
<th>$\chi^2$/d.f</th>
<th>RMSEA</th>
<th>SRMR</th>
<th>CFI</th>
<th>TLI</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Model based on final model for whole sample</td>
<td>2.02</td>
<td>3</td>
<td>.57</td>
<td>.68</td>
<td>.000</td>
<td>.01</td>
<td>1.00</td>
<td>1.02</td>
</tr>
<tr>
<td>1</td>
<td>Model based on final model for whole sample, with three ns paths removed</td>
<td>11.16</td>
<td>6</td>
<td>.08</td>
<td>1.86</td>
<td>.085</td>
<td>.06</td>
<td>.978</td>
<td>.944</td>
</tr>
<tr>
<td>2</td>
<td>Model based on final model for whole sample, with one ns path removed &amp; MI’s addressed</td>
<td>8.84</td>
<td>6</td>
<td>.18</td>
<td>1.47</td>
<td>.06</td>
<td>.03</td>
<td>.988</td>
<td>.969</td>
</tr>
<tr>
<td>3</td>
<td>Model based on final model for whole sample, with one ns path removed &amp; MI’s addressed</td>
<td>6.88</td>
<td>6</td>
<td>.33</td>
<td>1.15</td>
<td>.035</td>
<td>.04</td>
<td>.996</td>
<td>.991</td>
</tr>
</tbody>
</table>

7.9 Overview of Findings for Study 2

7.9.1 Predictors of Dissociation

Structural equation model analyses generated good fitting models that enabled exploration of trauma, personality, and adjustment as predictors of dissociation.
Findings were both consistent with past research and raised suggestions for future exploration. Overall the results of Study 2 bring together the traumagenic and social cognition models of dissociation. The traumagenic model espouses the idea that trauma is an essential factor in the development of dissociation and the social cognition models propose that factors within the person such as personality vulnerability and fantasy proneness are also factors.

**Hypotheses 1 and 2:** As expected, a significant direct pathway was found between childhood abuse and dissociation, suggesting that those who experience more severe childhood abuse also experience more dissociativity, especially pathological dissociation. Also as expected, there was a direct pathway between childhood sexual abuse and increased dissociativity.

**Hypothesis 3:** The hypothesis that there would be a direct pathway between N and dissociation was not supported in any of the models. An SEM pathway of note showed that there was a direct pathway from childhood abuse to N. This then became an indirect pathway from childhood abuse to dissociation via N, through resilience, to dissociation. Childhood abuse was associated with increased N scores, decreased resilience scores, and then increased dissociation scores.

**Hypothesis 4:** Hypothesis 4 was supported. In all analyses fantasy proneness was found to have a direct positive pathway to dissociation and was the strongest predictor of dissociation in all but one analysis (the SEM analysis for the older group). In relation to the exploration of a possible mediating role of fantasy proneness, a second pathway showed a direct pathway from childhood abuse to fantasy proneness, and then from fantasy proneness to dissociation. In these models, the association between childhood abuse and dissociation is mediated by fantasy proneness.

**Hypothesis 5:** In examining the association between childhood abuse and fantasy proneness, as expected, there was a direct significant positive pathway between childhood abuse and fantasy proneness.

**Hypothesis 6:** Hypothesis 6 was supported. There was a significant positive association between childhood abuse and N. In the related exploration of the pathway between N and fantasy proneness, SEM analyses showed that this association was not significant when using the full-scale CTQ. This pathway between N and fantasy proneness only became significant when the CTQ subscale of sexual abuse was examined. Therefore, the exploration of an indirect pathway from childhood abuse to N to fantasy proneness to dissociation showed it was non-existent.
While there were no hypotheses relating to the trait agreeableness (A) and its association with dissociation, in many models there was a negative association between A and dissociation. Specifically, in post hoc correlation analyses (see Appendix D.3) it was found that the “trust” facet items in the A domain were the most strongly endorsed in relation to dissociation, suggesting that those who experienced more dissociation were also less inclined to trust those around them.

### 7.9.2 Research Questions

**Predictors of pathological dissociation:** In relation to the first research question examining the predictors of pathological dissociation, SEM results showed that the pathways for the predictors of pathological dissociation were the same as for the 28-item DES. The main difference was that childhood abuse was a stronger predictor for the 8-item DES-T ($\beta = .20$) than it was for the 28-item DES ($\beta = .15$)$^{11}$. The same pattern was evident for the CTQ subscale of sexual abuse (see Appendix D.1 for other subscale results).

**Resilience and dissociation:** Results for the second research question regarding the effects of resilience on dissociation showed that individuals who report being more resilient experience less dissociation, both normal and pathological. There was also a strong, direct negative pathway between N and resilience, and this pathway was the strongest in all analyses. In addition, within these models the association between N and dissociation is mediated by resilience.

Furthermore, there was a direct positive association between fantasy proneness and resilience. This association mediates the association between fantasy proneness and dissociation. Those experiencing any type of childhood trauma who were more fantasy prone, and who were more resilient also experienced less dissociation than those who were less resilient. Therefore, fantasy proneness may not necessarily be maladaptive. For summary and discussion of post hoc analyses conducted between A, fantasy proneness, and resilience (see Appendix D.3).

**Age differences in dissociativeness:** Results for the third research question showed there were differences between the younger and older age groups in their reporting of their dissociative experiences. There were five noteworthy pathways for the younger group, and four for the older group. The first pathway of interest for both

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$^{11}$ See appendix D.2 for results pertaining to the DES20 as an alternative comparison to the DES-T results
groups showed a direct significant association between childhood trauma and dissociation. It is interesting to note that while the older group reported significantly more childhood abuse than the younger group (see Table 7.13, and ANOVAs in section 7.8), childhood trauma for the younger group was a stronger predictor of trauma than for the older group (see Figures 7.7 and 7.8).

The second pathway of interest for the younger group was from childhood abuse via N and fantasy proneness to dissociation. This pathway was not significant for the older group. The third pathway was from childhood trauma via N to resilience and the younger group also had a direct negative pathway between trauma and resilience, which was not significant in any other SEM analysis. The fourth pathway for both groups showed that the association between trauma and dissociation was mediated by fantasy proneness. The fifth pathway for the younger group was from childhood abuse via fantasy proneness to resilience, but did not extend to dissociation as in previous models. Therefore, while those who were more fantasy prone were also more resilient, this increase in resilience was not related to decreased dissociation. A further result of interest was that the older group reported that resilience was the strongest predictor of dissociation. This was the only model in which fantasy proneness was not the strongest direct predictor of dissociation but resilience was the strongest.

In conclusion, after examining the predictors of dissociation in this Study 2, the results seem to bring together both the traumagenic and social cognition models of dissociation. Childhood abuse was shown to be only one of a number of contributing factors relating to increased dissociation scores. In addition, a further important conclusion supports the Chapter 6 findings that, in this sample, there is no evidence of a category of individuals whose dissociativeness is qualitatively distinct as pathological. Items purportedly measuring characteristics of such a subgroup generated remarkably similar conclusions to items not so selected.
CHAPTER 8

STUDY 3: INDIVIDUAL EXPERIENCE OF DISSOCIATION

Studies 1 and 2 examined aspects of dissociation using quantitative methods. Study 1 in particular, investigated issues relating to the measurement of dissociation and its impact on diagnosis of the dissociative disorders, and on clinical work. Study 2 followed on from Study 1 and examined possible predictors of dissociation, most of which were suggested by prior research. Unlike the quantitative approaches of the previous studies, Study 3 was designed to allow a select number of participants from Study 2 to relate their experiences of dissociation in everyday life.

Chapter 4 highlighted the paucity of literature relating to the phenomenological nature of dissociation apart from clinician observation of signs and symptoms. The studies pertaining to pathological dissociation reviewed in Chapter 4 all interviewed individuals from a clinical population. None of them examined the differences between those who are highly dissociative but do not have DID, and those who have DID with the classical switching between alters. Perhaps there are no differences, but to date it appears no-one has asked. As mentioned at the conclusion of Chapter 4, a study that includes these aspects would broaden the existing literature in the dissociative field that has focused solely on DID and components of the dissociative experience for that population.

8.1 Aims of Study 3

Tensions in the literature point to one central question for which a definitive answer is wanting: what is the essential nature of dissociation, especially its pathological face? To complement the quantitative approaches of study 1 and Study 2, this Study sought to advance understanding of the issue by going to the source. Study 3, therefore, aims to extend the research of Studies 1 and 2 by exploring aspects of the lived experience of dissociation. The primary aim was for the participants to tell their story, referring to concrete events that are suffused with meaning and significance (Eatough & Smith, 2006). A second aim was to draw a sample from a wider population of high dissociators to include others who are not necessarily diagnosed with DID or DDNOS in order to broaden the richness of information about dissociation. Previous studies have drawn their participants from clinical samples with a known diagnosis of
these dissociative disorders. A third aim was to elicit information from the participants about specific areas of interest to the researcher, especially to do with therapy and its impact on dissociation.

**8.2 Epistemological Statement**

I first became interested in the topic of dissociation many years ago when I found myself interacting with troubled individuals in the course of my nursing career and in church/pastoral counselling in which I have been engaged for 30 years. Intermittent contact continued with one individual, “Louise,” for over 20 years. I had often wondered how to best help people in her situation, so I embarked on a course of study that led me along a path of discovery of human psychology.

A moment of illumination occurred during one of my third year undergraduate Abnormal Psychology lectures about the dissociative disorders. I realised that this might be what Louise had suffered from for many years. From that lecture onwards, I was motivated to find out more about the dissociative disorders and to gain the knowledge required to help her and others with similar problems. When Louise discovered that dissociation was the topic for the current project, she asked to be one of my “guinea pigs”.

**8.3 Methodology: Interpretative Phenomenological Analysis**

van Manen (2006) described qualitative writing as:

… an active struggle for understanding and recognition of the lived meanings of the lifeworld, and this writing also possesses passive and receptive rhetoric dimensions. It requires that we be attentive to other voices, to subtle significations in the way that things and others speak to us. In part, this is achieved through contact with the words of others. These words need to touch us, guide us, stir us. (p.713)

Interpretative Phenomenological Analysis (IPA) (J. A. Smith & Osborn, 2003), the analytical method chosen for Study 3, is one such qualitative method that allows participants to touch us with their words. Smith and Osborn maintain that IPA is a suitable approach to assist in finding out the perceptions of individuals facing particular situations, and to discover how they make sense of their personal and social worlds. The

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12 Pseudonyms are used throughout
central premise of IPA is that humans are “self-interpreting beings” (Taylor, 1985, cited in J. A. Smith & Eatough, 2006). This means that individuals continually try to make sense of events, objects and other people. Therefore, IPA is concerned with exploring in detail the lived experience of individuals and how they make sense of them.

In particular, the aim of an IPA study is to report in detail the perceptions and understandings about a particular phenomenon. IPA allows researchers to explore, in depth, the meanings that particular experiences, events, and/or states hold for participants (J. A. Smith & Osborn, 2003). Smith and Osborn maintain that the research process is dynamic in that it allows the researcher to have an active role in the process by attempting to gain an inside look at what the participant is experiencing. This is a difficult task and requires the researcher to attempt to understand what it is like from the viewpoint of the participant, that is, to take their side. In addition, IPA is a form of inquiry that allows the researcher to have prior theoretical ideas and questions about the particular phenomenon and acknowledges that the researcher has their own conceptions that complicate access to the participants’ experience. However, the IPA approach maintains that the researcher’s conceptions are important to the process in order to make sense of the participants’ world through a process of interpretative activity (J. A. Smith & Osborn).

Consequently, IPA-style research questions are usually framed broadly and openly, rather than attempting to test a researcher’s predetermined hypothesis (J. A. Smith & Osborn, 2003). Instead, an area of interest is explored flexibly and in detail. The sample sizes are small and usually homogeneous. Therefore, detailed analysis of each participant’s transcript takes time. Because of the time- and resource-intensive nature of IPA research, Smith and Osborn suggest a sample size of only five to ten participants. It is a purposive sample because of the need for a more closely defined group for whom the research question is relevant.

There are three important theoretical underpinnings of IPA. The first is phenomenology, which is concerned with how an individual perceives an object or event as opposed to giving an objective statement about the object or event itself (J. A. Smith, 1996). The second is symbolic interactionism, which argues that the meanings individuals ascribe to events can only be made sense of in the context of social interactions. Finally, the third theoretical base is a process of interpretation known as hermeneutics (J. A. Smith, 2007). IPA is intellectually connected to hermeneutics because it involves a two stage interpretation process, or double hermeneutic, in that
while “[t]he participants are trying to make sense of their world; the researcher is trying to make sense of the participants trying to make sense of their world” (J. A. Smith & Osborn, 2003, p.51).

According to Smith (2004), there are a number of characteristic features of IPA. First, it is idiographic, that is, IPA examines one case in detail until some degree of closure or gestalt happens, then moves on to the second case, then the third and so on. Then a cross analysis of cases is conducted for convergence and divergence of themes. IPA is also inductive. Unanticipated themes are allowed to emerge during analysis, and the aim is not to verify or negate specific hypotheses that have been established after studying prior research. Thus, themes may emerge that have not been elicited by the researcher. Last, IPA is interrogative and has as a key aim making a contribution to psychology through interrogating or illuminating existing psychological research (J. A. Smith, 2004). Furthermore, IPA shares the concern of deciphering the relationship between peoples’ cognitions, what they say, and their behaviours with both cognitive psychology and social cognition (J. A. Smith & Eatough, 2006).

There are different levels of interpretation in IPA (Larkin, Watts, & Clifton, 2006). The first level summarises participants’ concerns but does not interpret the meaning of those concerns. The second level goes deeper, finding patterns of meaning and reporting them in thematic form. IPA research develops a more interpretative analysis of the participant’s account, taking the initial descriptive analysis and delving into the meaning of the participant’s claims in relation to a wider social, cultural, and theoretical framework. It places the person in context, and examines their relatedness to the phenomenon being studied.

8.4 Method

8.4.1 Interview Participants

Nine participants (2 males and 7 females) took part in Study 3. The demographics and results from their structured interviews are presented in Table 8.1. Selection criteria and recruitment are described below.

8.4.2 Interviews

Participants took part in a single interview of two parts. The first section was the Structured Dissociative Disorders Interview Schedule (DDIS) (Ross, 1996) (see
Appendix B.3), and the second section was a semi-structured interview (see Appendix B.4) compiled by the researcher and designed to be flexible enough for participants to talk freely about their lives and experiences of dissociation.

The Dissociative Disorders Interview Schedule (DDIS) DSM-IV version (Ross, 1996): The DDIS was used to ascertain whether any of the nine participants had a formal diagnosis of dissociative identity disorder (DID), or any of the other dissociative disorders, and, secondly, to obtain a trauma and mental health history. The DDIS asks participants for demographic data, information about past and present medical and psychiatric diagnoses, trauma history, and questions pertaining to the five dissociative disorders (according to DSM-IV criteria), and commonly comorbid disorders such as Major Depressive Disorder, and Borderline Personality Disorder. The DDIS usually takes 30-45 minutes to complete depending on the complexity of the interviewee’s information. Some questions require “yes/no/unsure” answers, and a score of 1, 2, or 3 respectively is given depending on the answer. Other questions require “Never, Occasionally, Fairly Often, Frequently, or Unsure” and are scored 1, 2, 3, 4, or 5 respectively. The scores are totalled at the end to determine a diagnosis. The qualitative aspects of the DDIS interview process, where the participant expanded beyond the forced choice answers, were analysed using IPA.

Ross (1997) states that the DDIS has good clinical validity, returning false-positive diagnoses of DID in less than 1% of cases. It also performs well in distinguishing between DID and DDNOS, which is the most difficult diagnostic differentiation according to Ross. In over 500 patients, the DDIS has been shown to be a valid and reliable structured interview able to discriminate between DID and other diagnostic categories. As can be seen from Table 8.1, the participants reported a comorbidity of disorders, not just a dissociative disorder.

Semi-structured component: Semi-structured interviews are the preferred method of data collection for IPA studies because of their flexibility, allowing for modification of initial questions as the participants respond (J. A. Smith & Osborn, 2003). The researcher is then able to probe important and interesting areas as they arise allowing the participant to introduce issues of which the researcher might not have thought.
Table 8.1
Demographics and Summary of the Structured Interview Results for the Nine Study 3 Participants

<table>
<thead>
<tr>
<th>Participants</th>
<th>“Cheryl”</th>
<th>“Marlene”</th>
<th>“Wynne”</th>
<th>“Susan”</th>
<th>“Megan”</th>
<th>“Louise”</th>
<th>“Vi”</th>
<th>“Samuel”</th>
<th>“James”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dissociative</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>identity disorder</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Dissociative</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>DDNOS</td>
<td>Dissociative amnesia</td>
<td>N/A</td>
<td>Dissociative amnesia</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>disorders</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DES scores</td>
<td>48</td>
<td>34</td>
<td>66</td>
<td>65</td>
<td>60</td>
<td>62</td>
<td>42</td>
<td>57</td>
<td>45</td>
</tr>
<tr>
<td>DES-T scores</td>
<td>56</td>
<td>31</td>
<td>59</td>
<td>51</td>
<td>53</td>
<td>65</td>
<td>34</td>
<td>59</td>
<td>43</td>
</tr>
<tr>
<td>Childhood physical abuse</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Unsure</td>
<td>Yes</td>
</tr>
<tr>
<td>Childhood sexual abuse</td>
<td>Yes (SRA)</td>
<td>Yes (SRA)</td>
<td>Yes (SRA)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Unsure</td>
<td>Yes</td>
</tr>
<tr>
<td>Gender</td>
<td>Female</td>
<td>Female</td>
<td>Female</td>
<td>Female</td>
<td>Female</td>
<td>Female</td>
<td>Female</td>
<td>Male</td>
<td>Male</td>
</tr>
<tr>
<td>Age</td>
<td>32</td>
<td>54</td>
<td>54</td>
<td>24</td>
<td>51</td>
<td>51</td>
<td>54</td>
<td>20</td>
<td>40</td>
</tr>
<tr>
<td>Marital Status</td>
<td>Single</td>
<td>Widowed, Married 2nd time</td>
<td>Married</td>
<td>Single</td>
<td>Divorced</td>
<td>Married</td>
<td>Divorced</td>
<td>Single</td>
<td>Married</td>
</tr>
<tr>
<td>Children</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Occupation</td>
<td>Unemployed</td>
<td>Home duties Volunteer</td>
<td>Home duties Student</td>
<td>Unemployed</td>
<td>Working</td>
<td>Home duties Working Student</td>
<td>Student</td>
<td>Employed</td>
<td></td>
</tr>
<tr>
<td>Medical conditions</td>
<td>Asthma</td>
<td>Diabetes</td>
<td>Hysterectomy</td>
<td>Chronic fatigue</td>
<td>Polycystic ovary syndrome</td>
<td>Ataxia (l-sided weakness)</td>
<td>Diabetes Asthma Hypothyroidism Osteoarthritis</td>
<td>Arthritis</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>“Cheryl”</td>
<td>“Marlene”</td>
<td>“Wynne”</td>
<td>“Susan”</td>
<td>“Megan”</td>
<td>“Louise”</td>
<td>“Vi”</td>
<td>“Samuel”</td>
<td>“James”</td>
</tr>
<tr>
<td>----------------------</td>
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<td>---------</td>
<td>----------</td>
<td>------</td>
<td>----------</td>
<td>---------</td>
</tr>
<tr>
<td>Suicide attempts</td>
<td>2</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>6</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>None</td>
</tr>
<tr>
<td>Substance abuse</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Somatisation disorder</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Borderline personality disorder</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Schneiderian symptoms</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Depression</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Paranormal experiences</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Trances</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Imaginary playmates</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Unsure</td>
<td>No</td>
</tr>
<tr>
<td>Depersonalisation disorder</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>?</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Other psychiatric disorders</td>
<td>Schizophrenia</td>
<td>Anxiety</td>
<td>N/A</td>
<td>Panic disorder</td>
<td>Anxiety disorder</td>
<td>Conversion disorder</td>
<td>Bipolar disorder</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Medications</td>
<td>Antipsychotic</td>
<td>Antidepressant</td>
<td>Cipramil</td>
<td>Antidepressant</td>
<td>Antipsychotic</td>
<td>Antidepressant</td>
<td>Antipsychotic</td>
<td>Antidepressant</td>
<td>Antidepressant</td>
</tr>
</tbody>
</table>
8.4.3 Research Questions

The research questions were in two parts according to the structured and semi-structured components of the interviews. First, it was necessary to formally assess dissociativity and psychopathology of the nine participants. To this end, the DDIS was used.

Second, there were a number of issues, and to address them a number of research questions were generated from the literature about dissociative disorders. The first set of research questions were formulated to elicit if there are different types of dissociation and to find out what happens during an episode of dissociation. The second series of questions were designed to explore the past history of the individuals’ dissociative experiences, to remember what it was first like when they realised they were dissociative, and to discuss the sense they make of why they dissociate.

The third question grouping was designed to explore present time experiences about what they are doing, feeling, thinking, and experiencing when they dissociate. A further research question related to how dissociation helps or hinders in everyday life, and the last set of questions was concerned with experiences in therapy and what their dissociative experiences were like before and after they began therapy. This last research question emanated from the debate about the aetiology of the dissociative disorders. The sociocognitive model suggests that therapists model DID to their clients who then learn to enact the alters (Spanos, 1996), so this last research question was designed to elicit information about whether DID is perhaps a learned response through therapy.

8.4.4 Procedure

There were a number of inclusion criteria for participants of Study 3: (a) a score above 30 on the DES, which is the suggested clinical cut-off score above which individuals are purported to experience pathological dissociation (Carlson & Putnam, 1993; Carlson et al., 1993); and (b) a Bayesian probability score of above .8 on the DES-T, which is also purported to indicate membership in the dissociative taxon (Waller & Ross, 1997). This score was determined by using the SAS scoring program developed by Waller and Ross (see Chapter 6, section 6.4.3, and Appendix C.1). It was unknown prior to interview whether any participants would have the diagnosis of DID, but Carlson et al. suggest this is a possibility for those with DES scores of 30 and over. Carlson et al. used discriminant analysis, plus a cut-off score of 30, and Bayes’s theorem...
to classify patients with the possibility of having an MPD diagnosis. According to discriminant analysis in a representative subgroup of patients with dissociative disorders, the DES sensitivity was 76% and its specificity was 85%. The cut-off score of 30 produced similar results and the application of Bayes’s showed that 17% of subjects scoring 30 or more would have MPD and 99% of those scoring less than 30 would not have MPD. Therefore, using a cut-off score of 30 as an inclusion criterion in the current project was likely to ensure the inclusion of some participants with DID. In addition, an attempt was made to include younger as well as older participants, and male as well as female.

Participants were selected from those who had completed questionnaires in Study 2 and who gave their contact details for possible inclusion in Study 3. Some were contacted by phone where a number was provided, and others were contacted by email (see Appendix B.2). More than 50% of Study 2 participants gave their contact details for possible inclusion.

In all, 20 individuals who met the inclusion criteria were invited to participate in Study 3. Of the 20 contacted, 15 (75%) were female. Eleven of the 20 accepted the invitation to attend an interview, however, one male cancelled the appointment and one female failed to attend at the appointed time. Therefore, nine participants, with an average age of 42.2 years, gave consent and participated in the study. DES scores of the nine participants ranged from 36.64 to 66.1 ($M = 53.2$), and DES-T scores ranged from 31.25 to 65 ($M = 50.1$). Using the DES taxon SAS scoring program, four participants were identified as having a probability of 1.0 of belonging to the taxon, four had a probability of .99, and one had a membership score of .85, but met the DSM-IV criteria for DID according to the DDIS interview.

In addition, according to the DDIS interview, five of the participants met the DSM-IV criteria for DID, and four did not (see Table 8.1). Of these four, one met the criteria for DDNOS, and three met the criteria for dissociative amnesia. Prior to the interview, four of the five diagnosed with DID had also received a formal diagnosis of DID by a psychiatrist (this was one of the questions in the DDIS interview). Participants were assigned to groups according to these results from the DDIS interview. Table 8.2 shows the participants’ pseudonyms and group membership.
Table 8.2
Participants’ Pseudonyms and Group Identification

<table>
<thead>
<tr>
<th>Participants</th>
<th>Non-DID group</th>
<th>DID group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Susan</td>
<td>Cheryl</td>
<td></td>
</tr>
<tr>
<td>Megan</td>
<td>Marlene</td>
<td></td>
</tr>
<tr>
<td>Vi</td>
<td>Wynne</td>
<td></td>
</tr>
<tr>
<td>Samuel</td>
<td>Louise</td>
<td></td>
</tr>
<tr>
<td></td>
<td>James</td>
<td></td>
</tr>
</tbody>
</table>

8.4.4.1. Informed consent and ethical considerations.

Participants were offered a choice of location for the interview. Three chose their own home, two preferred to attend the Swinburne Clinic for Psychological Services, Hawthorn, and four chose to come to the researcher’s private counselling rooms. Interviews lasted between two and three hours with an optional coffee break between the structured and semi-structured components.

A plain language statement about Study 3 was provided to participants about the Study (see Appendix B.1) and written consent was obtained at the beginning of the interview (See Appendix B.1). Each participant was informed that they were free to withdraw from the interview at any point. They were also asked if there was a possibility of them switching to an alternative personality-state during the interview if they felt stressed. If that was likely to happen, they were asked what would help to switch them back, or alternatively, how they could be safely helped to return home.

Ethics approval was initially obtained for both Studies 2 and 3 from the Human Research Ethics Committee, Swinburne University of Technology in June 2004. For changes to Study 3, ethics approval was obtained from the Human Research Ethics Committee, Swinburne University of Technology on April 8 2005.

Because the participants were answering some potentially traumatising questions, they were asked about their emotional and mental state at the conclusion of the interview. This open question led to two participants reporting concern about how the information they had given might be used. They indicated during the interview that they had experienced SRA and were afraid of repercussions if they revealed too much.

An offer was made to phone participants the following day to ensure they had not been adversely affected by the interview. One participant felt they would not need to be contacted. Two did not answer the call or respond to the message left. One participant
was adversely affected and needed to talk things through. She was reminded of the coping strategies she had already put in place. The remainder of participants indicated they were “okay”.

In fact, the stories the participants shared were poignant, often heart rending, and painful for them to tell. Conversely, the stories were also painful to hear, and in the 24 to 48 hours following an interview, the researcher would often need to spend time debriefing. Despite the references to painful memories, each participant was more than willing to share their perceptions and experiences order to make some sense of their own suffering, and so that others who suffer similarly can be helped along in their journeys.

In considering the ethical injunction to ‘do no harm’ to the participants, it is difficult in a study like this to categorically ensure this will not happen. However, the general consensus was that the interview had been helpful and enlightening to the participants, as well as giving them an opportunity to help others who might be in a similar position to themselves.

8.4.4.2. Transcription.

The interviews were audio recorded, and subsequently transcribed by the researcher and two others (see Appendix E.1 for sample transcription). Transcription rules for this current study were developed to facilitate uniformity across interviews and do not follow any previously set conventions. It is acknowledged here that transcribing is part of the methodological and theoretical process of research, and as such, has a constraining effect on the subsequent coding and analysis of the data. Transcripts are social constructions and depend to a great extent on the method used to transcribe.

Analysis of the data begins with the transcribing process, not subsequent to it (Lapadat & Lindsay, 1998, 1999).

The transcription rules to which the current project adhered are as follows: (a) interviews were transcribed primarily word for word; (b) some repetitions and incomplete sentences were left out, as were utterances that did not make sense; (c) a ellipsis using three full stops ‘…’ indicated a word, such as ‘um’, being left out, or long pauses; (d) grammar that did not make sense was corrected or, alternatively, [sic] was added for colloquialisms; (e) all the interviewer's interjecting words (e.g., yeah) and encouragements (e.g., uh huh) were left out, and only the questions asked and comments made were included; (f) when the interviewer's interjections were included, they were put into square brackets e.g., [yeah]; (g) to protect participants’ identities pseudonyms
are used throughout. Names of any third persons or organisations mentioned have been replaced with their role or function. Places names have been replaced with a description of the type of place, e.g., [a Melbourne seaside suburb]; (h) if the participant laughed or became teary, this was mentioned in brackets; and (i) words that the participant specifically stressed were underlined. In the body of the thesis, many of the participants’ comments are edited to delete sections unnecessary to the understanding of the excerpt. The ellipsis symbol “…” was used to replace the deleted sections.

**Thematic analysis: Living with Dissociative Disorders**

**8.5 Defining Dissociation: Types, Descriptors and Purposes**

Although the phenomenon of dissociation involves the occurrence of altered psychological states, there are many ways in which it can manifest. In fact, the experiences of dissociation seemed unique to each individual respondent. The participants gave rich portrayals of what dissociation was like for them, and they would often apply labels to the various types of dissociation they experienced. The names the interviewees gave their dissociative states were often descriptive of types, e.g., the “shaky one.” However, occasionally some called it “dissociation” as well as another descriptive name. When specifically asked, all participants could also identify different experiences of dissociation even though most did not realise this until the interview. Nevertheless, despite the uniqueness of each individual’s experience, the stories of dissociation can be roughly categorised into two broad types: (a) stories about the absence of a normal connection with reality, told by those in both DID and non-DID groups, and (b) stories about the presence of another state or personality, which were told only by those in the DID group. See Table 8.2 for the participants’ group memberships. The characteristics of these two types are described separately below. Appendix E.2 presents a sample of the first stage of data analysis.

**8.5.1 Dissociation: Absence of Normal Connection with Reality or Altered State of Consciousness**

The dissociative experiences reported by the participants in this section manifest as an absence of a normal connection with reality, or altered state of consciousness.

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13 Throughout the chapter, those in the Non-DID group are denoted by a (non-DID) next to their names and those in the DID group with (DID).
Participants in both the non-DID group, and the DID group described these absences of normal connection with reality. As described in Chapter 1, a range of dissociative states are commonly experienced, and are not considered pathological. These include absorption or daydreaming (Ross, 1997), derealisation, depersonalisation, out-of-body experiences, and complete mental blankness (R. J. Brown, 2006; Holmes et al., 2005). In these instances, the individual experiences an altered state of awareness or consciousness that incorporates a sense of separation from the body, or from their sense of self, or from the external world. In other words, they experience an absence of connection. These forms of dissociation can also occur in combination, and can be acute temporary experiences (ranging from mild to severe) or become more severe chronic conditions with associated functional impairment.

While the experiences described by the participants in this section fall under the rubric of normal spectrum dissociation these experiences were sometimes described as distressing. Three themes were identified: absorption; trauma-related blacking out/blanking out/shutting down; and depersonalisation, or a sense of not being in the body.

8.5.1.1. Absorption.

The concept of absorption can be described as a normal aspect of dissociation and an escape from reality, yet some forms of absorption might be disruptive and distressing. A number of participants relayed a sense of enjoyment and escape by becoming totally engrossed in their fantasy world. Others found the lost time to be distressing, especially if they did not intentionally seek the dissociative state of absorption. The participants’ responses indicated two types of absorption: voluntary and involuntary.

*Voluntary Absorption:* Most people experience some degree of dissociative absorption as they involve themselves in the story-line of a movie or book (Butler & Palesh, 2004), however, there are some who find themselves completely enraptured by their fantasy worlds. Three participants describe this type of normative absorption, although each interviewee characterised the state in different ways.

James (DID) reported that he loved reading. In fact, he became so absorbed in the story that he would not put it down until he had finished, even to the point of reading through the night. While sleep deprivation from reading might be problematic from time to time, his absorption in some movies impacted him adversely such that: “...*my anxiety*...”
goes up a lot and so I will just walk out...it actually hurts on the inside, so I'd rather not [watch]."

Alternatively, Cheryl (DID) disliked reading, but described the way in which she would become oblivious to her surroundings when she watched movies or TV programs. She would continue in the fantasy context even after the film or show had ended. She recounted one such situation:

*I have a tendency to actually place myself in [movies or TV shows], and will find myself just standing outside having a cigarette and talking to these people in this TV show as though they’re really there...My hands were going and everything, so I was really involved in whatever it was that I was talking about.*

Susan (non-DID) experienced absorption differently from the above examples. While she became absorbed in movie plots, she was able to forget reality. She described this type of dissociation as a place of retreat or rest. That is, it enabled her to move away from her thoughts and anxieties. She explained:

*I’m really passionate about film and things like that...I’m actually able to forget everything while watching a movie. That’s one of my treats. I’m able to relax during a movie... Being absorbed in it and, also, not just what’s happening in the movie, I’m also interested in ways directors use light and angles. Everything just excites me, and I’m completely absorbed in it. It’s like a block of chocolate or my favourite song...watching a good movie is just a treat.*

However, Susan’s episodes of absorption could often result in a more distressing type of dissociation, which she referred to as the “staring type”. In fact, she often found that normal TV, in contrast to movies, can start the “staring”.

In contrast to the previous respondents, Louise (DID) did not need an external stimulus such as a movie or book. Instead she uses a form of visualisation, which she calls “the ordinary type.” During times of stress, hurt or depression, Louise imagined “a nice tropical island.” She recounted the manner in which she would enter and use the state:

*I usually go and lie down... and... I disappear within myself... I think... peaceful places... I tend to save it for when things get really stressed out and really... the abuse is flying and I don’t want to know about it, so I’ll just go to the other room. [It] seems the best way to cope.*

Similarly, Vi (non-DID) experienced a sense of “switching off” (as distinct from “switching” in Section 8.5.2.1 below). She likened it to being “mentally away,” although
she was still functioning and still aware of real-life events. She said it was a wonderful release from the boredom/pain of long hospital stays. She recalled the time the “switching off” began:

…I was in hospital more than I was home for seven years. And…I could not move, so, I had to get myself away from the hospital…Okay, I put it down, at that stage to daydreaming, fantasising…But at other times I would have the proper fantasy. …I’d be off on my little island…I ‘spose because I was poked and prodded and [it was] so public in the hospital…my whole fantasy was always a deserted island.

This relatively common and voluntary type of absorption seems akin to fantasy proneness, as described in Chapter 3, which is an imaginative involvement or ability to set the theme and participate in an imaginative scenario while daydreaming or fantasising (Giesbrecht & Merckelbach, 2006; Levin & Spei, 2004; Wilson & Barber, 1983). However, there is another similar form of absorption that appears to be more involuntary, although for both types participants report experiencing losing time.

Involuntary absorption: A number of participants revealed they experienced states of absorption in which they would involuntarily lose considerable amounts of time. Megan (non-DID) calls these dissociative episodes “blanking out”. For her, “blanking out” is akin to being asleep and could occur even while performing a menial task. She described a situation where she might be doing a task, but she would blank out in the middle and “wake up” in a different time and place not knowing what day it is or where she is meant to be. Her anxiety levels would then rise as she tries to remember if she has missed an appointment or something else important.

Susan (non-DID) and Samuel (non-DID) also referred to blanking out. They explained they could be involved in a conversation and not hear a substantial part of what was said. Susan described it as, “… not, not being able to listen, but just blanking out.” After the initial blanking out, she would then begin “staring” (as discussed in the previous section). Susan refers to “staring” as “…very safe… I was just thinking ‘appealing’ because when I think back, it's like...[it]...kinda draws [me] ... maybe because there's a lack a responsibility, just letting your mind slack back off.”

Samuel’s (non-DID) description of the “derailing” of thoughts seemed similar to Susan’s blanking out. Samuel revealed that he would not hear all or part of what was said in a conversation. This means that: “…everything derails for 30 seconds or so, and
needs to be put back on track... just sort of staring up into space... yeah... just... getting off track, I mean not thinking about anything”.

While these episodes were short-lived, and normality was regained quickly, Samuel explained a sense of unreality or derealisation. He said:

[It’s]... like physically sitting here and having the effect that things just don’t make sense anymore... going through a shopping... checkout and picking up something, putting it on the bench and not realising, not understanding what it was, like knowing it had a name, but the name didn’t make sense... it would last for a few seconds and [I] sort of end up going “what, why, what?”

8.5.1.2. Trauma-related blacking out/blanking out/shutting down.

A second type of absence of normal connection with reality or altered state of consciousness was described in a number of ways, such as blacking out, blanking out and shutting down.

Total blackout: Although a number of participants spoke about absorption in terms of losing time, they also described other forms of disconnection from reality, or episodes of ‘blacking out’ or ‘shutting down’. This type appears to be different from the above form of involuntary absorption. For Louise (DID), this type of experience seems to be closely related to reliving or remembering past trauma. She lost time when blacked out or passed out. She says:

... when I was dealing with all the trauma, I don't know what sort of dissociation it was, but [the trauma] became such a reality in my life and I felt that it was all happening again, and I was reliving it and then I'd pass out. And I just couldn't handle any more. And my way of handling that was to cancel the system out. So,... I'd feel very ill, and I'd go off to the toilets and then I'd collapse.

Blank out/disconnection with reality: Alternatively, other participants remained somewhat more aware of their surroundings during these more distressing episodes of dissociation. In one of those times, Susan (Non-DID) describes being unable to communicate or move. She described the sensation as like “being in hell”, a trapped feeling. In trying to make sense of why it happens, she surmised, “maybe it's just information overload or emotion overload”. Consequently, her mind would shut down as she explains:

... I can't even make a thought or a sentence to even try and bring myself out of it, because I can't put anything together. It’s like... hell.... I just can't put a sentence together in my mind to say, “how-about-you-have-shower?” I wouldn't
even be able to, say, put one foot on the ground and then put the other foot next to it to start walking. I wouldn't be able to instruct myself to do anything.

More distressingly, Susan’s “safe” shut downs (described in the voluntary absorption section) would sometimes progress further into an emotional “angry type” that she was unable to control or stop until it had run its course. She recalled with frustration:

... in the past, I have, you know, become... uncontrollably violent, like, kicking things and throwing things around my room, screaming and crying and not being able to stop. [The safe type] is better, I guess, than doing that, because... [the angry type] takes over. I don't even realize I'm doing it and I'm screaming. I'm swearing like anything and I don't usually... Oh, you know, I'll swear sometimes, but not like this... It's just uncontrollable. I don't even know what I'm doing...

The way Susan describes this experience, it almost seems closer to the “presence of another state” (Section 8.5.2, below) than an “absence of connection with reality”, yet she did not meet the criteria for DID, which is characterised by the presence of another state. As Susan said, she much prefers the “safe one” to the “angry one” because it allows her to chill out and not think anymore.

Similar to Susan, Samuel(non-DID) also experienced an involuntary form of blanking out. He called it “the shaky one.” During these episodes he was likely to lose time. Indeed, it was the most distressing of all the dissociative states he experienced, as it would often result in suicidal thoughts. He described such an episode in detail:

... [It] ...tends to start off [with] sort of pins and needles in fingers and toes and spreads. [It] turns into a shakiness and things will just sort of... feel as if they stop going to my head... People will talk and say stuff and it will just sort of bounce off... but sometimes there is nausea with it, [and] full body tingliness... there’s been times I’ve been in lectures or sitting outside lectures... and been shaking all over and not seeing or hearing anything, and, you know, people have come up to me and tried, you know, shaking me a bit more to get my attention and say, you know, “What’s going on?” and I haven’t noticed...

James’(DID) experience of this type of dissociative state dated back to when he was a child. He explained the sensation of seeing himself as if he was in a dream. This sensation would last for a considerable length of time and he did not enjoy it.
...I remember having this real long session of just being totally blank, wouldn’t have a clue what’s going on, and...though I still functioned physically ...it’s almost like being in a dream, you’re trying to scream, but you can’t. Nothing comes out of your mouth, nothing...but you’re awake when it happens.

8.5.1.3. Depersonalisation: a sense of not being in the body.

Participants in both the DID and non-DID groups described having a sensation of floating above or not being in their bodies. However, for those in the non-DID group there was no presence of another personality (compared with the experience of Louise, see section 8.5.2.3). Each participant who described an out-of-body experience referred to it as resulting from a stressful or very painful situation. In fact, for all except two, this coping mechanism acted as a shield from the pain of a rape, or from repeated abuse. They used various names for this experience, such as floating above, and cutting themselves off.

**Floating above:** Three participants described a sensation of floating above traumatic events. Vi(non-DID) described this floating disconnection during a rape that happened when she was a child. She recalled:

...[dissociation] really worked for me...when I got raped...I didn’t know what was happening...and so, I was scared...and I couldn’t understand what I was doing really...During the rape I was just above, there, looking at it, and you know, I wasn’t in my body. That what was happening down there wasn’t happening.

Megan’s(non-DID) “not me there” type of experience also seems to be like the floating above experience described above. She recounted a feeling of depersonalisation although she did not refer to it as floating. Like Vi, Megan’s experience happened during the severe sexual abuse she suffered as a young child. Megan remembers the abuse that was perpetrated by her father, uncle and brothers, and recalls the memories as if she is watching a movie that was happening to someone else.

Marlene, on the other hand, described floating as being “there and not there”. It was apparent that stressful events triggered a sense of detachment from events happening around her. She recalled floating through important days, such as her two weddings, and consequently remembering very little of those events.

**Cutting self off:** While Vi(non-DID) had, on occasion, experienced the floating sensation as a child, she also referred to a feeling of being cut off or not really there as
an adult. Again, this state occurred when situations were emotionally painful. The purpose of the state was to dissociate from her anger, anguish, and pain with regard to: 1) learning of her husband’s infidelity, and 2) losing custody of her children. She recalled one such incident:

_I rang up one day [to speak to my children] ... and I just said, “Can I talk to the boys please?” And my husband said, “No, you can’t. (One’s] in the bath and [the other is] in intensive care in the hospital.” ...I just went ballistic. And he said, “If you don’t calm down, I’ll hang up”, which he did. And then I dissociated...I was still being rational, but I was totally, totally, totally cut off. And...I don’t know whether it’s dissociation or not, in that respect... you would say “Yes, it’s shock, it’s shock-induced trauma”...I was able to function, I was able to think, but I really wasn’t there. And, I think, in a way, I’ve maintained that[state] with my children ever since, which is where we are getting into dangerous areas._

Vi then went on to describe three components (sensual and cognitive) that accompany this type of dissociation: (a) an icy cold feeling on the inside; (b) disconnection from emotions; and (c) swapping to unrelated distracting thoughts. Curiously, at the conclusion of the episode, she will often be cognisant of solutions to the issue that triggered the dissociation in the first place. So, for Vi, it can be a beneficial tool in two ways: (a) she is removed from an overwhelming emotion; and (a) she is subconsciously able to solve the problem. In other words, it gives her space to think without the hindrance of overwhelming emotions.

In summary, the above types of dissociation have illustrated an absence of normal connection to reality. While some of these states presented as out-of-body-type experiences, others seemed to be a detachment from reality, or an emotional response to a situation. There seemed to be two purposes behind the more distressing of the above states. First, the respondents were able to separate themselves from traumatic emotions, events and/or abuse. Second, the separation from emotions enabled the processing of rational solutions to problems. In contrast, the dissociative experiences described next demonstrate a presence of another state or personality.

### 8.5.2 Dissociation: Presence of Another State or Personality

The following types of dissociation were described only by the DID group participants. As was mentioned in the definitions of dissociation in Chapter 1, Holmes et
al. (2005) and Brown (2006) suggest that this type of dissociation is characterised by a number of factors, which include functions that are outside the individual’s control due to a compartmentalisation of processes. Nevertheless, these disrupted functions continue to operate normally influencing cognition, emotion, and function. Furthermore, Brown suggests that this state is characterised by made actions that an individual does not feel they are controlling. The DID group participants illustrate this disrupted identity in the following subthemes.

8.5.2.1. Switching with amnesia.

The term ‘switching’ was used by a number of participants with regard to the presence of another state or personality. In particular, three participants, Cheryl\textsubscript{(DID)}, Louise\textsubscript{(DID)}, and Marlene\textsubscript{(DID)}, used the term “switching” to signify changing between alters, identities, or ego states. The amnesia associated with some switching was perhaps the most difficult dissociative state for those who experienced it to manage.

In Cheryl’s\textsubscript{(DID)} descriptions of switching, it is a volatile, unpredictable process that she is learning to tame in order to become more “normal” in everyday activities. Cheryl was usually unaware of her switching episodes. As a result, she could only provide third person eyewitness accounts of what happens during an episode. She described the first known time that someone noticed her switch:

\emph{I was talking to my best friend, and she was standing in front of me. It was a bit before sundown, ...I was having a cigarette, and she was standing there talking to me, and she said, later on, that it looked like a shadow just filtered across my face and everything about me instantly changed...the way I stood, the look on my face, my eyes, she said, were a different colour. I held my cigarette different, I smoked it different and my voice completely changed.}

Like Cheryl, Louise\textsubscript{(DID)}\textsuperscript{14} found that the unpredictable nature of switching could be problematic. For example, one time after a traumatic therapy session, she switched to child alters and subsequently went missing for a few hours. She had completely lost track of time and her family did not know where she was.

In contrast, Marlene\textsubscript{(DID)} experienced switching as a normal part of everyday life. It was so integral to life that it went unnoticed by her when it occurred. She found that

\textsuperscript{14} While Louise earlier in the interview labelled the dissociative phenomenon “switching”, she also calls it going inside herself. She seems to be amnesic for these episodes.
“Others around me might be aware of it...Yeah, it was just so much an every-day part of my life that I just didn’t recognise it at all...”

Interestingly, Cheryl, Louise and Marlene seem unaware of what happens during these switches. This seems to suggest that their memories are compartmentalised or not easily retrievable as is described in theory (R. J. Brown, 2006; Holmes et al., 2005) (see Chapter 1, section 1.11.2). In contrast, most of the DID participants who spoke about “going inside” (below) seemed to still have some contact with their surroundings and seem to sometimes have access to their memories of this period.

8.5.2.2. Going back inside or going inside self.

In contrast to “switching with amnesia”, three of the DID group spoke about “going inside,” which seems to be a different form of switching. For Wynne\textsubscript{(DID)}, James\textsubscript{(DID)}, and Louise\textsubscript{(DID)}, “going inside” seemed to be, primarily, a way of hiding, or of coping with a stressful circumstance. For Louise it was like a gathering of friends inside. She indicated during the interview that she (the host) was amnesic during these times.

*To me it was just that I was a conglomeration of voices inside...that we often went off and did things with each other inside ...It was confusing, and...I just kept listening to the voices and...you know, and we'd go off in tangents and two or three of us would get together.*

James, Wynne, and Louise felt that dissociation was a way of hiding internally. This was particularly so for Louise, for whom it was a form of escape from pain in order to find a safe place where others cannot hurt her. However, Wynne also conveys a sense that going inside can be a pleasant, conscious act. For example, she recalled instances when she would visit a teddy bear or ice-cream shop, where the host\textsuperscript{15}, as she called herself, purposely retreated back inside and allowed the child alters to ‘come up’ and have fun. She explained that she (the host) remains close by watching from inside,

\textsuperscript{15}When referring to the host personality, this usually means that part of the person, or personality that is dedicated to functioning in daily life. This is compared to an alter, which is a part of the person that is usually fixated in the past and responds to perceived threat (van der Hart et al., 2004). The alter may have a different name from the host and be perceived by the host as a different personality. Both Wynne and Marlene used this term – they seemed to be well aware of common terminology to do with the dissociative disorders.
because she was inquisitive about what was happening. Although during these times she also conveys a sense of switching she is still aware of what is happening.

Wynne graphically described what “going inside” was like. She explained:

[I call it] going inside myself. I can feel that the person who’s usually in my eyes, steps back behind my eyes, and sometimes we disappear right down inside. Or, alternatively, we can be sitting back here behind our eyes and somebody will come up and be looking through the eyes and speaking through the mouth while we’re still sitting back here and conscious of whoever’s talking.

This statement suggests that her inner world seems to be split into personality parts that can watch each other and switch places. As Wynne spoke she indicated that the host, as she earlier called herself, lives in the head and can ‘go back’ into the head (she pointed to behind her ears). This allowed other parts to come up from inside (she pointed to her abdomen).

Unlike Cheryl, Louise, and Marlene, Wynne claimed that she was not amnesic when “going inside” and did not lose time. She said, “...I’m co-conscious\(^{16}\) ...like, my little ones will come out and play with my teddy bears, and they can go in when I feel that they are being threatened or observed.” However, Wynne conveys a sense of detachment between the host and alters as though they are different people living within the one body. In addition, during this part of the interview, Wynne commented “Now, that’s hard for you to write all that down.” This shows an interesting awareness of the ‘normal’ reference point as compared with her own perspective.

James(DID), like Louise, spoke about going inside and seeking a place of peace. Similar to Wynne, James explained that alters came up to “a window” when they spoke. He could also see the different parts of himself inside and seemed to know what was happening most of the time. He tried to clarify the nature of his experience:

It’s like I have a window at the front. ...In the past, what used to happen [was that] ...whoever stepped up to that window, said whatever they wanted to say. I wouldn’t stand back but I would see what was happening. Does that make sense? He also conveyed this was almost like taking a holiday and letting someone else do the work for him.

\(^{16}\) Co-conscious refers to the fact that both host and alter are aware of what is happening. Wynne again seems to know the accepted dissociative field’s terminology for this phenomenon.
8.5.2.3. Depersonalisation: Experiencing the presence of another state or personality.

Like a number of respondents, Louise_{DID} refers to a sense of floating above her body whilst in the midst of a traumatic experience. However, her description of the phenomenon indicates that during the out-of-body experience, another personality took her place for the trauma event. Hence, this description of “going inside” resembles depersonalisation. She explained:

*It is like going inside and...it's like an out-of-body experience in some ways because you're kind of looking down on what's happening but you're not a part of it...Yeah. As soon as [the abuser] came in it was like a light switch switched on and, you know, little Louise took over...it's like she took all of the stuff rather than [me]. I was kind of floating above the bed. I can't really explain...*

Likewise, Wynne describes a floating above experience that involves the presence of another state or personality. She explained: “I was aware of the fact that...that when I had that surgery, that one of me came out and looked at me on the surgery table and saw...And was traumatised by that.

Cheryl_{DID} also experienced a type of depersonalisation or floating above that was perhaps more unusual than the other participants’ experiences. It also included the presence of another state or personality. She, as the alter personality ‘Protector’, described Cheryl’s birth experience:

*I being ‘Protector’, have distinct memories of Cheryl’s birth, in that I was standing outside watching her being born and she was dead when she came out of the womb, and the doctors put her in a cot and pushed her over to the other side of the room away from her mother, and were desperately trying to revive her.*

8.5.2.4. Somatisation: Body memories.

Body memories, or somatoform dissociation experiences, are thought by some (e.g., Nijenhuis, 2004) to be indicative of pathological dissociation, and are included as a form of compartmentalisation by Holmes et al. (2005). As the term suggests, somatisation involves physiological manifestations as a result of past traumas. Marlene reported experiencing somatoform dissociation, or body memories, which again
highlights the more hidden nature of her dissociative experiences. It seems that traumas hidden deep within are triggered by ordinary everyday activities such as going to the gym. The manifestation of these memories then appears in the form of body symptoms, such as back pain. However, it seems that the event that triggered the response cannot fully account for the reaction. Marlene’s account of somatisation indicates that the intensity of the reactions was greater than what one would normally expect given the circumstances:

A lot of my stuff has come back as body memory ... what I did [to trigger the body memories] was push a weight that was more than what I would normally push... But this time it left me feeling a bit sore in the back and by the time I woke up the next day, I was starting to get a lot more sore. And the day after that, again, I couldn’t get out of bed (laughs)... I was in tremendous pain, so that triggered into what was locked away underneath and it gradually came up.

Other times it happens a lot quicker than that.

In summary, as can be seen from the above accounts, the participants referred either directly or indirectly to two categories of dissociation: (a) an absence of normal connection with reality that is, at worst, distracting, and, at best, helpful; and (b) the presence of another state or personality, which the participants found distressing, hard to control, and/or destructive. Louise epitomised the two categories in her comments as she spoke about an “ordinary type” and “another type that dealt with the trauma”. This section has dealt with the participants’ descriptions of dissociation, and the following section examines how the participants made sense of the origins of their dissociativeness.

8.6 In the Beginning: Recounts of Personal Histories

Literature about the aetiology of dissociation highlights a heated and ongoing debate (see Chapters 2 and 3). As mentioned earlier, proponents of the sociocognitive model of dissociation suggest this is a socially constructed disorder and is iatrogenically generated in therapy (e.g., Barry-Walsh, 2005; Spanos, 1994). However, in the dissociative disorders field, the predominant trauma model proposes that severe and prolonged childhood trauma is seen as a primary cause of DID. However, for those who do not have DID, but nevertheless, are highly dissociative, the question is whether prolonged childhood trauma is still a contributing factor in the aetiology of their disorder, or whether there are other predisposing factors.
All but one participant indicated they had experienced some sort of childhood trauma. Three, Cheryl\textsubscript{(DID)}, Marlene\textsubscript{(DID)} and Wynne\textsubscript{(DID)}, named cult activity, generational curses (their words), and SRA as being a major underlying reason for why they dissociate. Cheryl and Marlene also indicated that they suffered child abuse from their parents. However, for Cheryl, parental abuse, and the fact that she was raped at age nine, seemed to be more an afterthought than a core predisposing factor.

8.6.1 No Idea!

Three of the four non-DID participants could give no reasons for the origins of their dissociativeness. In fact, Samuel\textsubscript{(non-DID)} could not remember most of his childhood from age five to age 15 years. Having had no understanding of why he dissociates, he explained, “I haven’t decided on reasons, I suppose.” Initially when asked about past trauma, Samuel indicated he was unsure whether or not he had experienced trauma. However, later in the interview Samuel mentioned that he thought he had been bullied at school, although he was reluctant to say it happened for certain. He was not even sure when the first episode of dissociation happened:

\begin{quote}
(After a long pause)...I think it happened at some point during Year 10, in which I would have been fifteen, but I can’t remember any details about it. I know that during Year 10 I had the shaky one.
\end{quote}

Alternatively, Susan\textsubscript{(non-DID)} recalled a little more about why and when she started to dissociate. Remembering the situation at school, she said:

\begin{quote}
...I don't even remember grade six much. I remember grade five. I can't even remember who my teacher was in grade six...I felt very different... That would be my first memory of disassociation [sic]...I noticed that from year seven onwards, I was missing what teachers were saying. I was going in and out of conversations. But I didn't connect it at all...I couldn't understand why the teacher would say, “Okay, now go and do it” and everyone [would] put their head down and start working and I'd be like, “What did he say?...I've no idea what I'm to do right now”
\end{quote}

Additionally, Susan indicated that she had experienced childhood physical and sexual abuse, although she did not link these experiences with the onset of dissociation.

Megan \textsubscript{(non-DID)} thought that the blanking out began subsequent to a workplace accident five years previous, when she fell and broke her nose. The trauma, and subsequent anaesthesia associated with the operations, precipitated episodes of seizures.
and periods of lost time. However, her statement that she remembered little of her childhood suggests she might have been dissociative prior to the accident. Megan admitted:

...it’s really hard to remember a lot of stuff in teenage years – the naughty stuff sticks out more...Ahh, sneaking out my bedroom window and going off to dance with my brothers. My god, I don’t even remember high school stuff. I didn’t remember the stuff all about the subjects things, only that I have kept in my filing cabinet what I’ve done...I read through it now, to think back to those classes. Like even when I was little I don’t really remember anything between seven and... It’s just sad I can’t tell my kids a lot about my childhood because I don’t even remember.

Interestingly, when asked about childhood sexual and physical trauma, Megan mentioned that she had been sexually abused by her father, uncle and brothers from the age of three years until she was seven. At that time, an aunt reported the abuse and her father was then convicted and jailed. Notably, Megan does not link the abuse to her dissociative tendencies even though she reported her psychiatrist has hinted at the possible connection. Instead she wonders if the current symptoms of “blanking out” occur because of stress.

8.6.2 Escape from a Painful Reality

Unlike the previous respondents, Vi(non-DID) had a greater sense of when and why her dissociation began. The “daydreaming type” started as a way to escape reality during a traumatic time in her childhood. Vi remembered,

...I started to [daydream] when I was sick in hospital at six years old. I was in hospital more than I was home for seven years. And, of course, with the problem that I had, I could not move, so, I had to get myself away from the hospital. And I would. Okay, I put it down, at that stage to daydreaming, fantasising, and that’s what I’d do.

Louise(DID), also explained her understanding of why she is dissociative. As a child she learned how to create imaginary friends to escape the loneliness of isolation and bullying at primary school. She recalled her early experience:

...it kinda was like being in a world of my own...The kids kinda used to make fun of me and I’d go off into this imaginary world...It was there that I found solace, I guess, and companionship and friendship...there was always somebody I could
go and play with...at playtime rather than having to be on my own. ...But the problem is, sometimes after I got home, I'd still talk to her like she was...like she was kind of part of me, I guess.

8.6.3 Responding to Emotions

While Vi and Louise traced their dissociativeness back to childhood trauma, Megan felt that her dissociative tendencies and conversion disorder were:

...stress related. Not accepting the disorder. Like I fight [it] - that sometimes I don't believe I have conversion disorder. That's only the doctors saying [it] because they don't know what's caused it. But they're making me believe that it is.

Despite making this claim, she did not perceive herself to be a person who stressed. Megan felt that her personality type was not conducive to having a conversion disorder or dissociative symptoms because she believed that those disorders are related to stress. Instead, she rationalised that the stress perhaps came from not accepting the diagnosis – a tautological argument that seemed to create confusion and distress. As a result, she then wondered if the stress of trying to rationalise the conversion disorder precipitated the “blanking out”. The conundrum then increased her frustration – and so it went, around in a vicious cycle.

Perhaps Megan’s dilemma stemmed from a reluctance to face her past. When asked whether she related her condition to childhood experiences, she replied,

No. No, my psych says sometimes that, you know, abuse can cause this later in life.

Then the direction of the monologue abruptly changed as she continued:

But I always feel that I handle stress really well. ...I'm a very calm placid person, I don’t lose my temper. I don't know how to really get angry. And I've gone through a bad divorce, that sort of thing, and what I've had to handle I think I've come through it pretty well and raised three kids who have all got really good jobs and... so I feel like I handle stuff really well. So that's why I find it very difficult to accept that when they say conversion disorder, that I'm not the personality to have [that]...
8.6.4 Responding to Physical and Sexual Trauma

Seven of the nine participants indicated that trauma contributed to their dissociativeness. Both Vi (non-DID) and James (DID) could date their dissociative tendencies back to experiencing sexual abuse as children. Vi recalled, “During the rape I was just above, there, looking at it, and you know, I wasn’t in my body. That what was happening down there wasn’t happening.” Likewise James believed that his alters “…were created there to help me through that time when things were happening to me that were just freaking me out.” That was when his uncle sexually abused him at age six years. He said, “…if there’s too much pain on the outside, you go to a different place, or you retreat back in here and let someone else handle the pain…”

Cheryl’s (DID) beliefs about the beginnings of her dissociativeness were somewhat more complex. Although she stated that her first memories of dissociating were at age six years, she spoke of having imaginary companions at age four years, but also claimed that it started “…in the womb…” as a result of curses. While the curses were prominent in Cheryl’s understanding of the origin of her dissociativeness, she also mentioned parental abuse and neglect, and a rape at age nine. Marlene (DID) also referred to pre-birth SRA abuse as the precipitating factor for her psychiatric condition, stating, “It started at conception”.

Like Cheryl and Marlene, Wynne (DID) also felt that the abuse started before she was born when her mother was subjected to rituals, although she indicated that the tendency to dissociate began in childhood with severe abuse. She stated:

...The trauma of what I’ve been through has been so horrific that the only way my brain could cope and my mind could understand was if I dissociated and put those memories and those experiences in another portion of my mind. And that allowed me [to]... survive, to function independently of those thoughts, memories, and experiences.

Nevertheless, when Wynne first experienced dissociation as a primary school student, “It scared me so much, I tried not to let it happen again…I can’t remember if I was aware of it again. I think I just completely closed down that area.” It took a long time before she told anyone “the kind of things I saw inside, you know, with regard to SRA…This is so much filth and disgust, and… your brain spins out…your host brain can’t cope with it...”
In contrast, Megan\textsubscript{(non-DID)} discounted her experiences of severe early childhood trauma as a reason for her dissociativity. Instead she related the onset of “blanking out” to a workplace accident five years prior to the interview. She recollected the incident:

\begin{quote}
I tripped on... the edge of a box in my office. I was proofing papers... I went to put the papers on my desk which was beside me and I must have stepped forward and went down with no hands and landed on my face on the floor. And [I] must have blacked out... Next minute I wake up in hospital... and... they said I'd broken my nose and that I'd have to come back in a week to have plastic surgery... When I had the operation to straighten my nose, I had three seizures in recovery... and woke up about 5 days later with my kids putting Christmas presents on my bed, and I thought they were joking. And that I actually lost five days...
\end{quote}

### 8.6.5 Spiritual Reasons: God and the Occult

For four participants, (Cheryl\textsubscript{(DID)}, Marlene\textsubscript{(DID)}, Wynne\textsubscript{(DID)}, and Louise\textsubscript{(DID)}) dissociative tendencies were linked with religious or spiritual beliefs, with two foci primarily on God and the occult.

#### 8.6.5.1. God.

Some of the DID participants felt that the ability to dissociate came as a divine gift. Louise\textsubscript{(DID)} explained her perspective,

\begin{quote}
I feel that God put it there to protect me... from the snide remarks of the kids at school, the unacceptance, the unpopularity, the clumsiness and everything else that I battled against in those first few years. I believe that God gave me that dissociation to handle all those torments that I got and maybe it was never to go any further than that... But that man stepped in and I got abused... but if [God’s] got an overall plan for our life, then He must have known that this was ahead and that these... personalities within me would help me. That’s been a bit hard for me to accept that that was the plan that God had for my life... I reckon it's neat, you know...
\end{quote}

In the same way Cheryl\textsubscript{(DID)} said:

\begin{quote}
...I’ve personally learnt that God works in amazing ways and He’s allowed the brain to be able to disassociate [sic] so that a person can go on without being drugged up and locked up in a padded cell. And I feel incredibly blessed for that.
\end{quote}
I have my moments of anger at Him, but, on the whole, I just...I feel...I don’t know how I’d survive without it, I really don’t.

8.6.5.2. The occult.

In contrast, Marlene\textsubscript{(DID)}, Wynne\textsubscript{(DID)} and Cheryl\textsubscript{(DID)} all indicated that cult activity and the occult played a part in the aetiology of their dissociation. Although Marlene thought that childhood abuse was also a contributor to her dissociative condition, she did not believe it was the primary reason. In her opinion, her condition was created through what she called “Monarch programming”. She explained that:

...one of the things that was uncovered recently, for instance, is that I was programmed to split every eight years... in my case, I was programmed to split at Halloween and all I needed to do was hug somebody that was also a survivor, and that’d be it. And it’s amazing when I look back...Well that’s part of what it’s like...the fact that it can be engineered to the degree that you’re not even aware that it’s happening...

...Some of those episodes [of physical abuse] have led to dissociation [sic]... yes they were severe, but I think because the framework of dissociation was already engineered before that, it was also easy to dissociate...

Marlene\textsubscript{(DID)}, like Cheryl, believed that the ability to dissociate started in the womb and was caused by curses and abuse by two similar religious organisations. Marlene felt that, because of the prenatal cult programming, “…in the SRA context, it’s also engineered, so...you don’t know any other way of life, because it goes back to the womb...” Nevertheless, she said that it was then easier to dissociate further when she was physically abused by her parents and relatives.

Wynne revealed that she experienced occult abuse as well as childhood physical and sexual abuse.

I had people astral projecting and talking to me...I used to have people who would try and take my spirit away. I don’t know if what I’m saying to you is understandable. They would come and try and take my soul and my spirit back to the occultic world and places where I’d been traumatised.

Later she observed that:

“...I’m not being accessed anything like I was before, so maybe [the physical abuse stopped] recently – [in my] 50’s...Well, because they access you
spiritually, or through spiritual pathways, then they can abuse you in whatever way they choose...physical, emotional, spiritual, sexual.

Cheryl(DID) also conveyed her belief that the abuse she suffered was not always from physical human beings. She confided that:

*With one or two exceptions, most of the abuse I’ve suffered has been, what we would classify as, on a spiritual level. ...To me it was no less real than a strange man breaking into my bedroom to have a demon come in.*

It was also clear that Cheryl believed that her life traumas had been predestined by occult practices that were performed generations prior to her birth. She continued:

*Before I was born, before my mother was born...It was my name and I was cursed...[A religious organisation] cursed my womb...it was mostly my womb that they were attacking ...cursing me from left to right to centre, they actually cursed my birth. They didn’t want me to be born...that’s where it started. That’s why it started and the emotional abuse...or neglect, that I received from both parents didn’t help, but was not really the sole cause for it.*

While these appear extreme beliefs, they are not necessarily to be discounted. Although Fraser (1997) advises caution in uncritically accepting abuse memories, he also acknowledges that there is often truth in patient’s SRA reports. Fraser stated that alters can sometimes sabotage treatment and fabricate stories, and because of the fantasy prone nature of some who have experienced childhood abuse, memories can be innocently distorted or added to. But he also maintains that some SRA memories are true, leading him to advise being cautious in too quickly discounting patient’s stories.

### 8.6.6 Reflections on Initial DID diagnosis

While the DID participants recalled painful and traumatic memories from their childhoods, they also referred to the time of their DID diagnosis as fearful and shocking for themselves and their families. Although Cheryl(DID) spoke about her fear of being locked up in a psychiatric hospital, other respondents had the added weight of family responsibilities to consider. Wynne(DID) conveyed a sense of distress and bewilderment as she remembered her initial reactions to the diagnosis:

*I didn’t know where to go, or what to do. I was totally overwhelmed... how do I live my life? I had two teenagers, I worked full time, I had a wonderful husband...what was I going to do? If I had these people inside me, how would I ever make time for them? So, when you first find out, it can be a tremendous*
shock…how am I ever going to live my life? How am I going to get through the daily routine of work?

It was also difficult for Louise (DID) who reported the ongoing consequences of the diagnosis for her family. She revealed:

I've got [son] always saying "Oh it was so good when you weren't here" and I know that it affected them in many ways. See, when people give the diagnosis for DID to a patient, they don't realise that behind that patient is a husband waiting for answers and solutions and usually gets nothing. There are usually kids that are very confused about why a person in the family is not functioning the way they should.

Because of the negative fall-out of the diagnosis on their families, some of the respondents found they needed to develop coping mechanisms. Wynne learned to manage by becoming more informed about her condition. She stated matter-of-factly:

... I thought the only way I'm gonna get through this is by learning about it, and I studied and I studied and I bought books, and I found I couldn't read, so I'd have to read the book maybe twenty, thirty, forty times ...maybe one person [alter] would read it, maybe another person would read it. Maybe the mind had split off in different forms when I was reading them.

8.7 Dissociative Experiences as an Adult: Patterns and Processes

Through analysis of interview data, it was clear that all respondents experienced dissociation in a number of different ways. However, despite the diverse responses, several underlying patterns and processes emerged.

8.7.1 Triggers

The participants’ responses revealed a number of triggers that precipitate dissociative experiences. In most cases, the triggers that cause physiological arousal seem to be normal hassles of everyday life, such as: adverse weather, loud noises, being in crowds, interpersonal conflict and/or closeness, Christmas (and other festivals), tiredness, criticism, and physical activity. The respondents also mentioned other stressors that are perhaps less commonly experienced as triggers by the general population, such as: full moons, Halloween, sexual activity, and also feeling helpless in terms of influencing broader international issues of social injustice.
It seems that the most common trigger of a dissociative state involves an emotional response to whatever is happening at that time. These emotional responses appear to be triggered by three broad categories of triggers, which include: (a) an emotional response to relationships and conflict; (b) an emotional response to environment; and (c) a response to emotions, such as anger, fear, or sadness, that seems to not be overtly connected to external triggers.

The complexity of relationships, conflict, stress, and emotions involves intertwined contexts that are difficult to separate. Nevertheless, for the purpose of clarity, the following section is separated into a number of subthemes.

### 8.7.1.1. Relationships.

Participants noticed that their relationships with meaningful others (both positive and negative) could trigger dissociative episodes. Marlene\textsubscript{DID} noticed that she experienced a dissociative episode following a pleasant spontaneous family group hug at Christmas. However, she was the only one who provided an example of a pleasant context stimulus. The others spoke of relational conflict (usually with partners, ex-partners or children) as triggers to dissociative episodes.

The most commonly discussed relational instigator of dissociative states was conflict between respondents and their partners, prompting emotional reactions. For example, Susan\textsubscript{non-DID} referred to her tendency to dissociate after quarrelling with her ex boyfriend. She admitted:

...a lot of times he has made me very frustrated and angry, because he’s said things that are just not true, or argued about something that is so over, that it's annoying, and I’ve just wanted to, you know, smash a glass or something. But all I’ll do is lie there and stare and not think...

Louise\textsubscript{DID}, Wynne\textsubscript{DID}, James\textsubscript{DID}, Samuel\textsubscript{non-DID} and Vi\textsubscript{non-DID} also discussed similar relational triggers.

Tension with children also seemed to trigger some respondents into dissociative states. Although Megan\textsubscript{non-DID} seemed less in touch with her emotions than the others, altercations with her children could lead to more dissociative episodes. One such time was when she had to ask her daughter to move out of the family home. She observed, “After that I had a lot of blank times.”

Some participants also found that their relationships with people who had conflicting or overbearing personalities could trigger a dissociative episode. Wynne\textsubscript{DID}
stated that she reacted to others who exhibited domineering behaviours. In particular, if
she did not trust someone, she said “…I will freak… by disappearing inside myself... you
shrink inside yourself ...I think the host person was out but we got terribly beaten up...a
lot of guilt, a lot of shame…it’s all heaped on you...

On the other hand, James\textsubscript{(DID)} identified one of his primary stressors as being
reminded of the original abusive childhood relationship.

...if there’s something that comes into my world and reminds me of what
happened as a child. That also causes the same type of stress...I know if I ever
met him again, there would be a problem. I’m quite happy to keep away.

8.7.1.2. Stressful situations.

The second external trigger-type was stress reactions. These could either result
from relational interactions or other situations that provoked high levels of arousal.
Cheryl\textsubscript{(DID)} often experienced difficulty dealing with the constant pressure of everyday
stressors. She described the process in which her defences wore thin to the point where
another part would take the upper hand enabling a switch to occur. One of Cheryl’s
alters, Protector, explained:

\begin{quote}
I get to the point where I need a break, and it’s usually ‘Vicious Slut’ [another
alter] that takes over from me. And I knew at the time that…I did need a break,
[but] now was not the time to do it, and I don’t know exactly what happened. But
I’m only marginally stronger than ‘Vicious Slut’ in will power, and she just
cought me at the precise right moment to take control. And she had a one night
affair…and that I feel extremely responsible for, and it is so unlike Cheryl [the
host]. It is something she would never have even considered. So, I feel a great
deal of shame
\end{quote}

Megan\textsubscript{(non-DID)} also reasoned that her blanking out episodes occurred when she
was more tired or stressed. She mentioned:

\begin{quote}
I get really confused and that's when I get all this spacing out and just
frustration. So, it's like that battle all the time within myself. And when I'm like
that I got to have this time out. I’ve got to stop, but it's there all the time... so I
have to go back and think through what it was...Well I put it down to tired,
because that's when I get really vague...
\end{quote}

Strangely, it appeared that she was not cognisant of tiredness during these times, stating,
“...because I don’t feel tired and I don’t feel stressed and so I’m thinking ‘Well, am I

\textbf{...}
stressed, am I tired?’” As a result, she seemed confused with regard to other possible reasons for dissociating. Given her tendency to discount childhood traumas (see section 8.6.1) it is not clear whether the trigger was simply fatigue or if it was associated with deeper and more elusive inner conflict. Indeed, there is the impression that Megan was constantly ruminating, trying to rationalise her condition. However, it was clear that it only generated more unanswered questions, which in turn, increased the stress and, consequently, her dissociative tendency.

**8.7.1.3. Environmental conditions.**

Environmental conditions were reported to be another form of external stimulus that can induce dissociative episodes. More specifically, two categories emerged from the data: (a) environments that enabled the respondent to exercise more control over the dissociative state, and (b) situations where environmental conditions are uncontrollable and produce involuntary dissociation. In fact, some interviewees believed they had been ‘programmed’ to switch when facing certain conditions, such as a full moon. Both Marlene\(_{\text{DID}}\) and Louise\(_{\text{DID}}\) mentioned a tendency to dissociate around full moon. According to Louise, it was at this time of the month when she was ritually abused as a young adolescent. She remembered:

> I used to travel down to the...cemeteries...I’d get phone calls and...things leaving funny sounding messages that I didn’t have a clue what the dickens was going on. And then I’d get in the car on full-moon nights and drive to these cemeteries and...One night I ended up at [a Melbourne seaside suburb] police station...and I said, “Oh, these people are trying to chase me,” so they rang a psychologist down at [that suburb] - who I’d stopped seeing - to find out whether I’d really imagined this...so [my husband] had to come down to [that] police station to get me...

On a less sinister note, James\(_{\text{DID}}\) felt that his tendency to dissociate was associated with the weather, particularly winter and summer. He describes his reactions:

> Yeah. I really get annoyed in the summer. I can’t handle the heat so, that causes me stress as well - true. I actually feel better internally and I feel I don’t daydream as much in the cold...in the winter. I just enjoy winter, I don’t know why. I do... just don’t like the heat, and I think probably because I find it stressful. I found myself more likely [to dissociate] in those times.
Alternatively, it was not surprising that some of the participants found that therapy could trigger a dissociative state. For example, in the early days of therapy Louise\textsubscript{DID} revealed that she tended to switch to child alters during a session. More recently, Wynne\textsubscript{DID} noticed she is more aware of switching whilst in therapy than in her daily life, although she allows it to happen at other times.

Several respondents revealed that being in a crowd was likely to trigger an altered state of mind. James\textsubscript{DID}, Cheryl\textsubscript{DID} and Susan\textsubscript{non-DID} found themselves reacting to groups of people, particularly when they were with those they knew. As Susan stated, “It just happens”. Nevertheless, she was familiar with the signs that a switch was imminent. She described the sensation: “…It’s feeling like I don’t want to be around all these people…It just becomes overwhelming. Also, I already find myself staring and not paying attention to what we’re doing.” Recognising the onset of a dissociative episode, Susan would then withdraw to a place where she could be alone.

On the other hand, Cheryl found that the switches between personalities were often involuntary, less controlled, and precipitated by anxiety about her surroundings. She said, “I don’t handle crowds very well …like shopping centres, or if the shop gets busy all of a sudden…Yeah, if I start to feel trapped, … That’s when it goes terribly wrong.”

Another noteworthy trigger for Cheryl was noise, particularly loud music. However, this did not seem to be the product of anxiety or stress, but rather, it was a familiar link with her childhood. She remarked “Noise seems to bring out the …[child alters] for some reason… I don’t get the impression that they like it. I just get the impression they are used to it …[my two brothers] were huge heavy metal fans.” It was clear that this tendency to switch with loud noise was problematic at times as she revealed, “Once, sitting at a traffic light in the car, and a P-Plater came up booming away…and the stereo just blasting so loud, and I couldn’t reach over and wind up the passenger window, so that triggered it.”

Conversely, Susan found that events that occurred in other parts of the world could impact her emotions to the point where her anger and sense of helplessness about social injustice would induce a dissociative state. She explained that it was “…when I feel…very strongly about…some things that go on in the world that I can’t do anything
about. Like, just for a recent example; when van Nuyen\textsuperscript{17} was hanged...That caused me to disassociate...”

For James\textsubscript{(DID)}, environments that involve “...sexual activity triggers it... Definitely...” This inclination had created a number of difficulties, and he admitted, “...I suppose that was one of the big triggers that got me to go see [a counsellor].” Marlene, on the other hand, found that certain non-sexual physical activities (such as a gym workout) could produce dissociative symptoms, especially in the form of somatoform dissociation.

Finally, Megan\textsubscript{(non-DID)} mentioned each time she had undergone an anaesthetic she had suffered inexplicable seizures. Her confusion was obvious as she said:

\textit{Yeah. I've read a lot of things. That [conversion disorder is] actually real. That's what I need to keep on saying, that it is actually real. And then I question why the seizures? Why have I had another seizure, what can...why don't they explain why that happened? Is it the anaesthetic? They keep on saying they don't know.}

Unlike the above environments where the respondents experienced difficulty managing their dissociative tendencies, a number of interviewees mentioned situations where they felt able to control, and perhaps even manipulate, the ways in which they dissociated. For example, if Wynne\textsubscript{(DID)} perceived a friendly environment, she would sometimes consciously allow the switching between alters. Although she admitted that she could generally control the dissociation and be “the adult”, she liked to allow times for “her children” and “teenagers” to play within a safe environment. She explained:

\textit{If I'm with someone who is loving and caring and accepts my inside people, then they come out...because they need to be nourished... I'm totally aware of inside kids... I would say, “Well there’s a teddy bear shop, so I’d let my little one come out and we’d go in and play... and you know, we love to go to Baskin and Robbins and...[have an ice-cream].}

Cheryl’s\textsubscript{(DID)} controlled environmental context was at night. After a number of embarrassing situations, she had contracted an agreement between all of the alters to allow them the freedom to do as they pleased in the evening on the proviso that they would stay hidden during the day. This was a conscious, controlled trigger that was used as a management strategy. She reflected:

\textit{\underline{_________}}

\textsuperscript{17} She refers to a controversial hanging of an Australian accused of drug smuggling in an overseas country
It take a great deal of energy to get through my day with helping out Dad in the shop. I’ve got to get myself to a point where I’m so focused and so tightly strung about it that I can get through it, and then at about...it’s usually about 8 o’clock at night...is when I allow myself to shut down. I disappear inside my room and watch TV and they run rampant.

Other environmental factors that Susan_{(non-DID)}, Cheryl_{(DID)}, and James_{(DID)} mentioned included becoming absorbed in movies and books (see 8.5.1.1). For Vi_{(non-DID)}, a boring university lecture could induce a dissociative state, where “I... have my nice little fantasies, and it would be...let’s just say, five times a week, not every day, but nearly.”

8.7.1.4. Internal triggers

As previously mentioned, emotions seem to play a prominent role in triggering dissociative episodes. While the excerpts in the previous three sections suggest perhaps that emotions are closely linked with relationship conflicts and stressors, the following extracts demonstrate ways in which participants could dissociate to isolate themselves from their feelings. In these discussions, participants commonly used words such as angry, lonely, suicidal, sad, and helpless.

For Susan_{(non-DID)}, emotional triggers were the worst type, resulting in severe dissociative episodes. She describes the perpetuating cycle in detail:

...When I'm feeling like...there's nothing else I can do in a situation,...like an argument or conflict...When I'm so angry that I really feel like...kicking things but, instead, I'm not moving at all, I'm just kind of staring. And then there's the times when I'm... (long pause) sad...and it is driven by sadness, and just feeling helpless, and just...just not wanting to feel...and at other times I don't even bother closing my eyes, I don't think, and I wouldn’t know how long I could lie there or sit there. I guess it's up to my body, or my mind. I don’t know...

She continued after a long pause

...Images might go through my mind... A lot of them are negative. It kind of snowballs and I get upset on that one thing, and then I'll have images go through my head of everything that I've been upset about for that week, or that month, until I just stop thinking at all...that's when I could lose time...

In a number of cases, the respondents’ ability to dissociate from emotions literally prevented suicide. It took Samuel_{(non-DID)} some time before he realised that
dissociative episodes were connected to his moods. The more extreme the mood, the worse the dissociation became. He explained the increasing intensity of his emotion:

_So, it happens when I’m way up and way down…there’s probably an emotion that appears from somewhere and starts it. And then that emotion gets exponentially worse... Emptiness. Loneliness...and then that may, or may not, transform into anger. Very commonly, suicidality will show up next to it..._

Thus, the subsequent distancing effect of dissociating from his feelings at times saved his life.

Vi_{(non-DID)} also found dissociation helpful in separating herself from emotionally painful situations. One such episode that she reported was when she was pregnant and she discovered her husband was having an affair. Although she was unable to articulate the circumstances to her doctor, he realised the situation was serious enough to induce premature labour. She said, “And I just went, bang, I mean, literally, I just shut down, and I honestly think that that’s just saved me from going into the full labour...” The ability to dissociate from the painful emotions saved her unborn baby.

Like Vi, Marlene_{(DID)} seemed to cut off from emotion, and detach from imminent negative events. She mentioned that prior to an episode “...sometimes there’s a very detached element to it. The emotion part of it disappears altogether...”

### 8.7.2 Strategies to Avoid Dissociating

Given that a number of interviewees were aware of the different types of triggers that could induce a dissociative state, they had been able to devise and implement strategies in order to avert episodes at least some of the time. For example, Vi_{(non-DID)} had developed a stress-free lifestyle “other than the stress I choose to impose on myself...” to minimise the extent to which she dissociates. In contrast, Wynne_{(DID)} claimed that she was able to control the circumstances under which she dissociates, thus preventing her alters from manifesting if she perceived that there was an adverse environment.

It appears there were several preventative methods participants had devised to manage the onset of a dissociative state. The first involved negotiations between host and alters. Cheryl_{(DID)} had used this strategy to prevent switching during the daytime. This had become necessary because, “I’ve learnt the hard way. If I keep trying to push them back, they’ll crop up at the most inappropriate moments. Like four-year-olds driving (laughs). So we’ve come to an agreement...They can have their fun after 8
o’clock”. In addition, she was careful to suppress the alters when she was with her family of origin. She said, “We have very strict rules about that. Nobody likes my family with any great degree of love and affection. So they’re just as happy to stay away from them”.

In a similar vein, James(DID) was more able to control or avoid switching by taking executive control over the internal system. He recalled,

...quite a while ago...it’s like I made general announcements in there, “This is what’s happening... I’m seeing (a counsellor) now.....a lot of this stuff is going to be resolved,” and it’s actually worked by me doing that internally. Still happens occasionally when there’s problems but it’s less now because I just said, “No. This is the way it’s going to be now”.

The second strategy involved maximising interactions in environments where switching is least likely to occur. By doing this, Louise(DID) seemed to be able to have more control over her dissociative tendencies. She reflected that:

It wouldn’t happen at Card Group. It wouldn’t happen when I’m doing something that I really enjoy doing. Probably wouldn’t happen when I’m shopping at the craft shops, and at a paper expo. It doesn’t seem to happen when I’m doing something practical, like getting a meal or doing the housekeeping. It seems to happen when I’m hurt, upset, stressed out...yeah, or I’m extremely depressed...I’m always alone when it happens. Very rarely would I be with anybody else...

The third preventative tactic was described by Susan(non-DID) who would sometimes be able to break into the early phases of dissociativity by using self-talk. She said, “...I just keep saying to myself, you know, “shower, shower, shower, shower” and every now and then the word ‘shower’ comes into my head even though I’m staring. I’ll actually go and do it...” Samuel(non-DID), on the other hand, recognised warning signs, such as tingly fingers. He said sleep was the only thing that would prevent or interrupt an episode once it had occurred, so he would find somewhere to lie down. In terms of prevention, Samuel noted that when he was active, he was often able to avoid dissociative states.

In summary, while the conditions for occurrence of a dissociative episode can been divided into a number of categories, the underlying themes indicate that emotions, such as anxiety, dread, fear, panic, distress, freaking out, hurt, or anger, play a major role in triggering dissociation. Yet it was clear that participants found it difficult to
define or articulate the underlying emotions they experienced. One reason for this might be because some of the respondents were amnesic during that time. Another reason could be that the participants tended to dissociate from the core emotions that accompanied the trigger. Their responses were more about what happens before or after.

However, if preventative measures were ineffective, or not implemented, an episode was imminent. Cheryl summed up the feeling of dread before becoming amnesic by saying,

“...the general sense of it is, ‘Please don’t let me do anything bad!’...you feel like you’re losing control or... the control you imagine you that have is purely imagined and that anything could happen...and I’m powerless to do anything about it...and that’s a pretty scary thought.”

8.7.3 Phenomenology of Episodes

The difficulty in studying the phenomenon of dissociation stems from the fact that the research participants’ lived experience is often of being amnesic during an episode. Consequently, gathering accurate and detailed data is problematical. Nonetheless, all nine participants were able to provide descriptions (albeit limited) of their experiences. Although amnesia often accompanies a dissociative state, it does not always seem to be a necessary component. Thus, while some participants experienced an altered state of awareness with amnesia, others (from the DID group) claimed they were co-conscious with an up-front alter and could remember what happened.

Therefore, some participants reported full amnesia for the entire time until transitioning back to a normal state of awareness, and others experienced a shift to an altered state of conscious awareness. This could also include altered responses to external and/or internal triggers. In addition to this change in state of awareness, there was also evidence of consequential behavioural responses. However, these responses were not always known to, or observed by, the participant themselves, but might be observed by external observers who may or may not intervene to break the altered state of awareness. A consequence of the external observation could be social and/or occupational implications.

8.7.3.1 Complete amnesia.

Individuals in both the DID and non-DID groups indicated that they could experience a total loss of memory for a period of time. The nature of the amnesia could
be either transient or it could last for longer periods. While it would seem that there is often an intervention to transition the participant back to a normal state of awareness, it is not always clear what constitutes such disruptions. Because the person has no memory of the event, what happens can often be known only through outside observation, or if there is tangible evidence remaining after the time of amnesia. This evidence could include the presence of things that were not there before, or the absence of items that were there previously. Cheryl_{DID} revealed that:

...A few other personalities...just like to get out and about every now and then and spending money on who knows what...I recently came home one day and found four DVD’s on the shelf...I’ve got no idea...Did I buy that? What the heck... apparently I did.

Marlene_{DID} also told of similar circumstances, such as arriving home from shopping “...and I had stuff in the trolley and I thought ‘I didn’t buy that’”. Travelling could also present a number of challenges for Marlene. She explained:

And there are times I’ve set off to go somewhere, and find that I’ve ended up in the wrong place and then I’ll think, “Well, how did I end up here?” It’s like I got there on auto-pilot, but I’ve not got to the right place.

By studying the participants’ anecdotes, it was apparent that amnesic episodes were accompanied by periods of “lost time”. Although Samuel_{non-DID} usually lost only seconds or minutes, he recounted an incident when he lost hours. He awoke from sleeping to find tangible evidence of the episode:

...once when it happened I went running and...forgot everything after that. I figured out that I went running because I fell asleep in my running gear. That’s how I know...I woke up the next day... with really sore legs...And [wondering] how I managed to run that far, because at that point I couldn’t run very far.

Louise_{DID} also recalled an occasion when she lost a considerable amount of time. She had switched to one of her child alters during a therapy session, and during this episode she visited the Plaster House following therapy to make things for her psychologist. Her account suggests that while she was there, she experienced an internal intervention, only to ‘wake’ and find, “And I had no idea how long I'd been there. I just knew...I just came back to being me; that I was supposed to be on the way home...and I'd been in [that suburb] all day...”

Loss of time was also a challenge for Megan_{non-DID} who could find herself in places other than where she thought she should be. In some instances she had ‘awoken’
in bed during the daytime with no recollection of how she got there. Unlike others who seemed to use internal interventions to break an episode, Megan’s dissociative states often seemed to be interrupted through external interventions, such as her cat or her son or daughter. The external intervention seemed to transition her back to a normal state of awareness.

While both Marlene_{DID} and Wynne_{DID} maintained that they and their alters were co-conscious, they both acknowledged they still lose time. In particular, this frustrated Marlene because it interfered with her daily activities. She said, with an edge of frustration, “I can get up really early to go to church on Sunday, and yet I’ll lose that time and I’ll be late...going to church has been a...nightmare!” Wynne also conveyed a sense of bewilderment as she stated, “its three o’clock and then [I] look at the clock and its five o’clock and wonder what happened. I’m not really aware of a big time loss. I’m only aware of ‘well, what happened to the day?’”

It was interesting to note that for those in the DID group it seems there can be two states happening at once: (i) amnesia; and (ii) an altered state of conscious awareness. During the interview, Cheryl_{DID} disclosed that there had been a semi-permanent switch to another identity. Another personality state, known as Protector, professed to have replaced the host and was now the prominent personality. However, the alter continued to use the name “Cheryl” to avoid confusion. In fact, she claimed she had not transitioned back to a normal state for almost three years. So, it appeared that the host Cheryl was amnesic while Protector experienced the altered state of awareness. She revealed:

*There is a personality called ‘Protector’, and it is her job to crop up when Cheryl has an issue that she can’t handle. She’s been doing this Cheryl’s whole entire life...just for a day or so, or a week or two. Whenever something happened that Cheryl struggled with greatly, she’d pop up so that everything looked normal, while Cheryl took the time out to deal with it...and then, when Cheryl was fine, she’d disappear again. [It] could be for a day or so, or could be for years at a time... Hmm... And that’s where I don’t know if it helps you at all, but in instances like this I feel obligated to say so, I am ‘Protector’. Cheryl has not been around for nearly three years... She is [still there somewhere], but she’s asleep.*
Although it was apparent that Cheryl, the host, was not aware while Protector was in control, other respondents revealed that both the host and alters were co-conscious, that is both host and alter are in an altered state of conscious awareness.

Altered behavioural responses can occur during amnesic episodes, and, in such cases, others may not understand what is happening. For Cheryl\(\text{DID}\), this had been problematic from time to time (e.g. others seeing her in a “punch-up” with an invisible ‘person’ while she was amnesic). Her tendency to become actively involved in movies can also have social implications. She recounted a recent event: “My six-year-old niece busted me about a month ago... and she’s just like, looking at me out the window and she comes outside and she goes, “Who were you talking to?” “What?... What?... What?” (Cheryl laughs). Cheryl also mentioned that before starting therapy, switching “…was extremely obvious. There was the whole body changes, not just an attitude or a voice. There would be very distinct physical changes.” It was clear that others could notice the changes.

8.7.3.2. Altered states without amnesia.

While several participants were unable to remember what happened during some of their dissociative episodes, there were many instances when they could recall their experiences. During these occurrences, the interviewees encountered various types of altered awareness. The data revealed four main categories of memorable altered states, namely: (a) altered states of conscious awareness; (b) altered responses to external stimuli; (c) altered responses to internal stimuli, and; (d) altered behavioural responses. While the subject may experience only one of these response types during an episode, it seems that they can also have various combinations of these states or even all four states at once. It is important to note that, it was not unusual for the DID participants to experience the presence of another state (such as the manifestation of an alter), while non-DID participants reported only an absence of normal connection with reality. Instances of these four altered states are presented below.

(a) Altered states of conscious awareness: Of the DID group, Wynne\(\text{DID}\) and James\(\text{DID}\) provided detailed descriptions of altered states of conscious awareness when they dissociated. It seemed the host personalities were aware of what was happening even when the alters were up front. This, is an example of an altered state of conscious awareness, with the alter being most aware, while the host observes what happens.
James gave the impression that he was constantly aware of his alters (see below) even when they are not up front at “the window”18. Mid-episode James’ awareness of the external world is contingent on how far back inside he (the host) goes. He described his experience this way:

I could see it [dissociation] happen. It’s like...I have a window at the front. Now...this was in the past, what used to happen...whoever stepped up to that window, said whatever they wanted to say. I wouldn’t stand back but I would see what was happening. Does that make sense?...[What I see] depends on the severity. If I’m just sort of day dreaming, I see a lot. The further down the scale I go, the further back I am. That’s like...I feel like I’m physically further back from the front, the front being that window that I described. I can still see but I have far less control, I have less input.

While James indicated that he was an observer during periods of altered consciousness, there seemed to be an order, or hierarchy among the alters which engendered a sense of control. James continued:

...I suppose, depends who steps up to the window as to what’s going on...it’s like, I’ve described this with [my counsellor]. [It’s like] that whoever is needed comes up. Now, there was one there that we had that was called The Guard. He was like the foreman, of all of them, and he would have a lot of say. Okay? But if another situation came up where that was his job (indicating another alter), he would come up,...okay. Then, depending on who [was] needed...and what they were created for in the first place.

Despite the sense that James was behind the scenes, he still seemed to have some form of control over his body even though an alter was at the window. The expression “physically further back” denoted the position that the host holds in his mind. He also conveyed that alternation of the alters was a constant process, and the different parts were continually in conversation with each other and the host on the inside. Thus it is possible that James lives in a constant state of mild altered awareness, which would exacerbate according to various triggers. To illustrate, James noted:

18 Each of the DID participants used different terms to describe the sense of their alters taking the prominent position of consciousness. It is also interesting to note that the respondents tended to indicate the hosts’ position during an altered state as being a silent observer who is positioned behind the alter(s).
Oh, [it happens] all the time, because for me to think of a singular mind and go, “think with that” it’s like, “What? How do you do that? What do you mean, ‘one’?” I’m serious. It’s not something that’s… I’m always having conversation in my mind…

Another way in which participants experienced altered states of conscious awareness involved absorption. Louise(DID) and Vi(non-DID), described the ways they would think pleasant thoughts and transfer their conscious thought to another place away from their current environment. While their attention was not on their immediate surroundings, they retained a sense of contact with reality (e.g., Louise knows the dog is in the room, is aware she has dissociated). Both Louise and Vi indicated that interrupting this state was relatively easy.

However, Vi(non-DID) also described a unpleasant altered state of conscious awareness when she was upset. She referred to sensations of coldness or burning inside, depending on the circumstance. She explained:

I’m still hovering around but I’m just not there. …It’s cold in there …and that then I think it does really equate with the type of circumstance. ‘Cause if it’s the abusive thing, I was cut off sort of next to my body. I could see everything that was happening. Again, I wasn’t above it, and if anything, it was more a burning feeling wherever I was. Whereas, anything to do with my kids, (laughs) it’s a cold one. I just go really cold and… (Vi)

Experiencing an altered state of consciousness was also unpleasant for Megan(non-DID). Like Vi, She described altered sensations such as feeling tired or vague. In particular, she explained the inherent dangers of being subject to such a state whilst driving a car:

...I must be…in control because there's no accident. And I stop at the red lights, but there's no memory [of it], like…and that's when I've got to say, "I'm awake, I'm awake. I'm behind the steering wheel, this is not a dream, I'm not sleeping". So I have to talk to myself that I'm actually here. I usually grab for a cigarette then (laughs). Think "oh no, stay awake, stay awake!…wind the window down, get some breeze on my face…just, I think, to feel…”

It was clear from this description that Megan tried to employ a number of strategies (with varying levels of success) to interrupt the altered state and to stay aware.

(b) Altered response to external stimuli: The second form of altered state involves disconnection from the surrounding environment. For example, the subject
may miss parts of conversations or be unable to recognise their surroundings, familiar objects or people. This, in turn, can result in diminished or inappropriate responses to outside stimuli. Samuel\textsubscript{(non-DID)}, Susan\textsubscript{(non-DID)} and James\textsubscript{(DID)} each referred to such experiences. In fact, Samuel admitted that there were times when he could not recognise his own reflection. On the other hand, Susan spoke about her inability at times to follow a conversation. She reasoned that:

\begin{quote}
I think sometimes my mind just shuts down because I can miss two sentences or I can miss, you know, a word, because I would have gone in and out for a second. Or I'll miss a whole sentence and realize I'm staring at the ground and have to ask...And that's just normal conversation. So, that's just when the teacher...is talking up the front...Or when Mum and Dad could be asking me something and I'll just go “what did you say?” because I didn't get any of it. They started talking to me and I'm looking at them and I'm not [there]...
\end{quote}

Similarly, Vi\textsubscript{(non-DID)} recalled an early incident where an altered state of consciousness resulted in inappropriate responses when her parents visited her in hospital:

\begin{quote}
Like, I remember distinctly once, of course, in those days...only parents could come in, and I have five siblings. And all the kids would be outside [the] Hospital on a little grassy green slope where I could see them, but they weren’t allowed to come in, and we weren’t allowed to touch, and all that sort of stuff. And they’d be playing and rolling around. So, there’s Mum and Dad trying to do their duty to me, and I would just be off, with them.
\end{quote}

Cheryl\textsubscript{(DID)} also revealed that she would often exhibit altered responses to her external environment in conjunction with experiencing an altered state of consciousness (i.e., absorption). One specific context for which she described these behaviours was when she watches movies and acts out the parts. Meanwhile, Megan\textsubscript{(non-DID)} described the change in physical sensation, saying...“like I think I’m awake, but the breeze on my face is different, like it’s a numb feeling. Yeah and that’s weird. And that’s when I think “I must be really fatigued”.

\begin{quote}
(c) Altered response to internal stimuli: Participants also shed light on incidents where their responses were incongruous with internal stimuli (such as strong emotions). For some, like Susan\textsubscript{(non-DID)}, this engendered a sense of being out of control. She seemed to struggle as she attempted to articulate her experience:
\end{quote}
When I'm angry...that can be quite scary because, yeah, my mind is screaming but I'm not moving ...like, if you could hear thoughts and emotions it'd be the loudest noise ever...But there is no...I can’t even make a thought or a sentence to even try and bring myself out of it, because I can't put anything together. It’s like...hell...Yeah...I just can't put a sentence together in my mind to say, “How-about-you-have-shower?” I wouldn't even be able to, say, “Put one foot on the ground and then put the other foot next to it to start walking”. I wouldn't be able to instruct myself to do anything.

Similarly, Louise(DID), in earlier days, felt her internal world was uncontrollable. In particular, the added complexity of dealing with multiple alters was hard to deal with: she said:

It's scary sometimes. It's confusing at times. Especially when you have a lot of different personalities coming in to, you know do their bit at the same time. You feel like you can be pulled every which-way, so...it's where you've got to maintain some sort of order...but sometimes it can be absolute turmoil inside...lots of different voices all at once all wanting to express their opinion.

On the other hand, James’(DID) inner world seemed to be much more integral to his sense of self. He indicated that his interactions with his inner world were based on social rules that had been established amongst the alters. He described a constant hubbub of noise on the inside, especially if his mood was low. In fact, the atypical internal systems necessitated a constant state of altered response to the internal stimuli. He tried to express his reality:

I counted a lot [of alters]... It’s like, if I go inside and have a look, that’s what I can see. Does that make sense? Because I do that often...it’s not like you walk into a room and see people inside. It’s a vague place. Yes, you can see it but the rules of how we perceive reality are not the same rules there. They’re different...it’s,...I can’t describe it...but the best way for me to describe it is that, it’s reality to me...Even like the physics we see in this real world... are different. It’s a different place, and it operates differently...speaking is different.

Sometimes there’s conversation going on there that I don’t know how to speak out. I don’t know how to say it, but it’s clear...I don’t know how to say it out loud, but in here [inside my brain] it makes sense...and it’s difficult to describe that, but that’s common... sometimes it’s fairly quiet, sometimes I can actually
go through times where I don’t actually think about anything and it’s so nice, but then other times it’s just noise.

Marlene(DID) told of how, more recently, she became aware of her own distinct inner world. The consequences of dealing with this discovery necessitated an altered sense of awareness to her internal stimuli. She outlined the unfolding of this realisation: 

...Helper’s role has been more to look after the inside system, look after the people that are there. Until recently I was aware that there was somebody there who was looking after things inside, but I hadn’t really met her. She didn’t make herself known until fairly recently... For a long time she just did her job and I didn’t know she was there doing it...

To summarise, the descriptions of the changes in conscious awareness illustrate the narrowing down of conscious awareness experienced when dissociating. Through this process, the environment becomes less prominent. The participants’ descriptions fit with definitions of dissociation in Chapter 1, section 1.5.

(d) Altered behavioural responses: Perhaps it is not surprising that altered states often lead to anomalies in terms of behavioural responses to the stimuli. However, not all behavioural responses are noticed by outside observers. James(DID) noted that his physical reactions slow down during a dissociative episode. Despite this slowing, his external behaviours often continued to some extent, albeit somewhat impaired. He explained:

“... it’s like hiding internally and having bare minimal [physical] functionality on the outside... when I do that, it causes me to almost stop working, [I] day dream...I’ve checked out. Physically, it’s hard to do something at that time...”

Because of his tendency to ‘slow down’, James’ ability to make decisions is also impaired. Hence, his capacity to work is, at times, reduced. During such periods, he asks his wife to help him. Although he believes that his workmates are not aware of his struggles, it seems that his wife sometimes notices the change when he switches or goes inside. He remembered, “[My wife] has seen me at different [times]... [the] first time it happened to us...who are you?...and I was speaking in different voices to her....

On the other hand, Wynne(DID) is quite deliberate in her behaviours in that she plays childhood games when the child alters are up front. It was apparent that her husband notices the change associated with the appearance of the child alters and so he would play along with them. Wynne laughed as she said, “We love to go down the beach...we call him the big daddy when we’re little...we got the big daddy to buy a
bucket and shovel and we made sand castles”. At other times, “… my teenager [alter] will play games with my husband…you know, flick each other with the towel, that kind of thing that goes on when you are fifteen.

Despite the notion that her husband was aware of the changes in her, she felt that strangers are unable to notice when her alters are up-front. She divulged a small secret:

*I’ll tell you something funny. This is something good about being dissociative. When you’ve got kids inside…I love teddy bears…I can go into a teddy bear shop and because I’m an adult, the lady who’s running the shop doesn’t mind an adult playing and looking at all the teddies and feeling them and holding them and cuddling them. Whereas, if you went in and you were a child, they’d think “Sticky fingers, put that down”*

Louise’s (DID) long experience with dissociation has enabled her to develop a number of strategies to minimise the social implications. In the early days, Louise would drive and become lost, and her husband often had to fetch her. Other times when she had switched to a child alter she would get down on the floor to eat fish and chips with her kids. Nowadays, when she notices the signs that an episode was imminent she would deliberately lie down before dissociating to a pleasant place. At these times she believed that no-one but the dog noticed. Conversely, Marlene (DID) reflected that during dissociative periods others noticed she is cranky, although she was unaware of it herself.

The non-DID respondents also referred to changes in behaviour while they were in the midst of an episode. Susan (non-DID) described that she, unknowingly, scratched her arm or pulled out her hair. Similarly, Samuel (non-DID) spoke about rhythmically banging his head while dissociating. He mentioned: “I have had people notice me banging my head on the table. I’ve also had people not notice me banging my head on the table…” Megan (non-DID) on the other hand, would find herself in places where she had not intended to be. She reasoned that she had moved while she was ‘blanked-out’

**8.7.3.3. Interrupting episodes.**

A significant theme was that dissociative episodes could be interrupted, either by the person themselves or by an external factor. This interruption then facilitates the transition back to the subject’s normal state of consciousness. There seemed to be two types of interruption: (a) internal from the participant, and (b) external. Either of which may or may not be helpful. Not all mid-episode interventions will be mentioned here, as
they are discussed later in the chapter (see social and occupational implications of dissociation).

(a) **External interruptions**: External interruptions occur when someone or something outside the mind of the participant (such as an object, or animal, or third person) interrupts the dissociative episode. In turn, this changes the direction of the episode, enabling the person to either return to a normal state of mind or hide the dissociative state. For example, Susan’s (non-DID) friend was an instrumental source of intervention. Susan explained:

> There have been times when I realise I've been pulling out my hair or scratching my face. Not enough to bring blood or anything, but just scratching, scratching my arm...[my best friend] definitely notices, because, she always uncurls my hand... because I don't even notice that I've got fists. So she's the first to notice if I start scratching, and she knows I pull out my hair in my sleep.

Megan (non-DID) would also respond when others who were important in her life touched her. She said:

> ...like the cat jumping on the bed that sort of brings me around, or [my daughter] touching my arm, or standing in front of me, or I’ve heard [my son] call out to me as well. He’s said “I've been calling out to you for[ages].

(b) **Internal interventions**: When there was no external interruption, Megan (non-DID) would sometimes attempt to halt her own altered states by self-harming or inducing sleep in order to connect her with the real world. She elaborated on her concerns:

> [Self-harming is] real because I can feel it. But I can't keep on doing that, and so that's why I go to take tablets, so that I can sleep till maybe I'll wake myself up. So that's a vicious sort of pattern happening. I've been sort of mixing medications and stuff and my Psych's saying he won't give me any valium any more because I took an overdose of that as soon as he gave them to me, and...because I just wanted to have time out. I just can't keep at this pace. I need to stop. Going to work's helping, because it becomes real.

Some of the respondents had learned to manage their dissociative episodes using their internal resources. Samuel mentioned that he was able to implement internal interventions when: “I know that I’m [banging my head on the table]. I normally know an instant before it happens and I’ve been getting better at stopping myself at that point, being able to intervene immediately.
Instead of intervening in order to halt an episode, Cheryl had developed strategies to cover the obvious dissociative behaviours. She details how:

...nowadays, I can switch three or four times in one conversation and have most people be none the wiser. ...I think part of learning to cope with the illness, is that we have learnt to mimic each other, so that it’s not as obvious to just anybody, but it does happen on occasion.

Hence, it seems that interventions, whether internal or external, are critical in terms of both interrupting dissociative states and enabling individuals to cope socially whilst experiencing an altered state of consciousness. This then leads to the final stage in the dissociative cycle, namely the post-episodic transition to a normal state of awareness.

8.7.4 Transitioning Back to Normal

Analysis of the interview data suggests that the transition back to a normal state of awareness is not always helpful or easy. In fact the person may experience a sense of disorientation or intense emotional responses during the transition. Cheryl’s (DID) alter, Protector, intimated the sense of trauma as “…she wakes up with screaming and crying and not fun. Because we are so closely entwined, I feel what she feels, so it is a lot easier for me if she’s asleep.” At other times Cheryl was left with a residual emotional response to the mid-episodic events even though she was not aware of what happened. She illustrated the sensation:

...It’s like being overwhelmed with this insane rage. Whatever has caused the [dissociative state] just angers me so much and I feel like I need to punch something... The people that have seen it have said I’m actually arguing with somebody. We’re punching each other up, I’m being thrown off the couch, I’m doing this, that, and the other. I have no recollection of that part of it, but when I do come back, I’ve still...I’ve got that lingering feeling of being angry and I’ve hit someone but [I have] no idea why, or no idea who I want to hit.

Megan (non-DID) also found the transition back to a normal state of awareness difficult and had developed transition processes in order to cope. She noted that, “…it takes time to sort of pass. But I can’t do anything once... that happens. It takes a while, and the only way is...to lay down and be quiet for everything to sort of to make sense again. On other occasions, the process was different, but no less difficult. She spoke about her sense of disorientation as:
...I go through the process “Am I awake, am I asleep?” It's an unreal feeling...But I'm awake, and I've sat up in bed and the cat's jumped up on the bed and I don't know if it's morning, day or night, or how long I've been there, what I was doing...that the cat sort of disturbed me...and I thought oh, am I getting dressed or am I (laughs) going to work. What day is it?...Like to have to check outside the window if it's light outside or look at the time, put the radio on, find out what day it is, what time it is, and sometimes to the frantic of finding my diary to see if I've got to go somewhere, and then the panic happens.

In contrast, James(DID) was perhaps more pragmatic than the other participants and has learned not to be hard on himself. He says “[you]...get on where you left off... It's just what happens and so you continue with what you were doing before...If I beat myself up about it...I just go down further. I won't, I can't do that. He also explained that he would ask his wife to help him if he lost time and could not think properly. In a different manner, Susan(non-DID) also liked to ease herself back into a normal state of conscious awareness. She explained:

...And after that I usually need to...kind of...do something for myself like, have some lunch, or have a cuddle with the dog, just something to bring myself...it's not...[like] I can go back and do what I was doing; I kind of have to build myself back up again.

Some of the participants found the transition back to a normal state of awareness traumatic, while others seemed to be less affected. Nevertheless, it was clear that they all experienced intense emotional responses to the process. However, despite the difficulties that were inherent in the dissociative experiences, the respondents revealed that it was a necessary part of life.

8.8 Can't Live Without It: The Implications of Living Life with Dissociation

Even though all participants reported that dissociation was frustrating and that life would be better without it, they also disclosed that dissociation served a number of desired purposes. First, it enabled the respondents to lessen the impact of trauma. It was also used as a strategy to handle stress and retreat from the demands of life. Indeed for most of them they reported that their ability to dissociate had kept them alive.

A number of participants revealed that dissociation had enabled them to survive trauma, and without that ability they may not be here today. According to some, the abuse was so horrific that they were unable to cope any other way. For those in the non-
DID group, such as Vi_{(non-DID)}, it enabled them to float above the rape trauma and watch like a bystander. Likewise, those in the DID group indicated that their alters were created to take the trauma of childhood abuse. As James_{(DID)} suggested:

*I believe [the alters] were created there to help me through that time [of the abuse] when things were happening to me that were just freaking me out... because if there’s too much pain on the outside, you go to a different place, or you retreat back in here and let someone else handle the pain, because that’s what they’re there for in the first place.*

Similarly, Wynne_{(DID)} said:

*...the trauma of what I’ve been through has been so horrific that the only way my brain could cope and my mind could understand was if I dissociated and put those memories and those experiences in another portion of my mind. And that allowed me, ahh, to survive, to function independently of those thoughts, memories and experiences*

Again, Louise_{(DID)}, a reported victim of SRA at age 13 years, stated: “*But I find what happened at that cemetery just...mind-blowing, and... I would never have been able to get through it if I didn’t have this tool.*” However, she mentioned that even before she had suffered SRA, at age 9 years an alter took the pain for her during sexual abuse. She explained, “*As soon as [the perpetrator] came in it was like a light switch switched on and, you know, little Louise took over...it’s like she took all of the stuff rather than [me]. As an adult, she found that the ability to dissociate is “...not an urgent thing. It’s not a thing I have to do to survive. It’s become now more a...escape from the reality of an abusive life really.” Therefore, while it was still helpful, she now used the skill in a different way.

A number of participants said dissociation had saved their lives. Indeed, several spoke of suicidal thoughts and/or attempts. As Marlene_{(DID)} explained, “*Oh, if it wasn’t there, I’d have been dead. There’s no way...a human being can go through what I’ve experienced and still be alive.*” Wynne_{(DID)}, Samuel_{(non-DID)} and Megan_{(non-DID)} also acknowledged that dissociation was a life-saving strategy. Cheryl_{(DID)} summed it up for everyone, saying, “*I just...I feel...I don’t know how I’d survive without it, I really don’t...I probably wouldn’t have, in all honesty. It would have just been too much. So...It’s been a life saver in a lot of ways.*

Dissociation also served the purpose of providing down-time, as Megan_{(non-DID)} and Cheryl_{(DID)} put it: “*me time*” or a “*bit of time out*”. Cheryl expanded on her
response, saying, “Just to be able to not have to think, not have to worry, not have to plan, or anticipate; somebody else can just take the reins for a while and I can just sit back and enjoy the ride.”

Susan(non-DID) went further to describe the enticing nature of dissociation, explaining: “I was just thinking ‘appealing’ because…it’s like…I don’t know…kinda draws…maybe because there’s a lack a responsibility, just letting your mind slack back off…But it just feels so damn comfy not to be thinking of answers.” Thus it appears that it enabled her to escape the responsibility of everyday life.

Finally, the respondents recognised the advantage that dissociation helped them to cope daily, even with the disadvantages of dissociation itself. Louise(DID) revealed that:

Yes. I wouldn’t have got through the last fifty, forty-nine, whatever, years if I hadn’t had it. And I’m sure that if I didn’t even have it now, I don’t think anyone would put up with the sort of abuse I’m having to put up with. I can’t do much about it. I don’t want to leave the home because I’ve been told legally not to leave the home. So, I’m stuck there. So, even today I feel like it’s helping me tremendously, and I think I’ve learned to use a tool that was designed for good, used for evil, and now I’m using it for good again.

It is interesting to note that, when participants were asked about what they thought their life would be like without a dissociative disorder, they found it difficult to imagine. In fact, James(DID) could not envisage life without dissociation. He thought it would be disadvantageous to not have it, indicating:

...but to have those things gone, well okay, who am I really?...it’s like what, do you start again? Do you start at the age of 40 something what you should have had when you were a little kid? I don’t know how you do that...

Others, such as Louise(DID), Megan(non-DID) and Susan(non-DID) felt that if they did not have dissociation they would have no other way of coping. They could not picture life without it as a way of escape. On the other hand, Vi(non-DID) and Samuel would miss their fantasies and the deeper benefits of dissociation when they needed it, while Wynne felt that: “…the thing that would be bad about it…not being dissociative, would be losing those on the inside that I now treasure, that give me so much life. And pleasure in life...”

From a different perspective, Cheryl indicated that there would be no risk-taking, and some days she would not survive:
Whereas...I still do have times when getting out of bed’s a big thing, and to be able to get out of bed every day, it’s miraculous most of the time, but without being able to disassociate [sic] I couldn’t do that. I’d be a lump, wouldn’t move, wouldn’t eat. I just wouldn’t function at all. So it is helpful...I think more than anything, it’s a survival mechanism, that’s all it is. It’s just one of those things... like a parachute... only not quite so scary.

Marlene’s response was a little tautological, as she explained:

I think...In terms of coping, well, it’s been a coping mechanism for the whole of my life, because I wouldn’t have been able to live with who I really am if it hadn’t been for the dissociation...or the reality of my life, would probably be a better way of expressing, because who I really am is still unfolding.

Thus, there is the double bind of needing dissociation but not really wanting it.

**8.9 Can’t Live With It: The Complications of Living Life with Dissociation**

While the participants felt that they could not live without dissociation, they also found it difficult to live with it. Dissociation was described as a bolster or haven that helped them cope with the areas of self, family, and work/life in general. However, it also adversely influences them in terms of their sense of self, their relationships with family and others, and their work and daily living. The respondents unconsciously communicated a love/hate relationship with dissociation, like a double bind. While the participants have described how dissociation had kept them alive and helped them cope with life within their relationships, work and daily living, they also felt that it hindered them in much the same areas.

Participants spoke about feeling a loss of control they have when dissociating. As a result, some of the respondents feared what might happen. The amnesic nature of Cheryl’s(DID) dissociation brought a sense of dread regarding what she might do or what might have happened while she was in an altered state. However, there was also a lighter side. She stated: “I’ve learnt the hard way. If I keep trying to push them back, they’ll crop up at the most inappropriate moments. Like four-year-olds driving (laughs)”.

Both James(DID) and Wynne(DID) also felt a loss of control as they became more dissociative. Megan(non-DID) concurred and explained that not dissociating would be good because she would “[get back] control (laughs). Control over my body... I don’t think I’d be so upset, too, because I sort of get that from anger, cross with myself, like, I’m going round and round in circles”. She went on to say:
That’s like…really like I’m starting life now. That’s where I find it really
difficult…all the things I’ve lost along the way, with that being out of my control,
but if I put another “why” before… the marriage, not my fault, not
understanding communication…now when you look back, that’s what you feel,
like, what a waste of time? That’s where you feel like you don’t need to be here.

8.9.1 Relationship Complications

Of all the disadvantages of dissociation, the data indicated that perhaps the most
destructive was the effect that dissociation can have on relationships. Louise_{(DID)} was
perhaps the one who most poignantly epitomised these devastating outcomes. Even
though at a very early age, she started to use her dissociative ability to ‘go inside’ when
school mates rejected her, as an adult she found the more advanced and chaotic forms of
dissociative ability detrimental to her family.

Both Marlene_{(DID)} and Vi_{(non-DID)} highlighted another issue regarding personal
relationships. Because of their earlier abuse and subsequent dissociativity, they seemed
to be more open to further abusive relationships. In general, it also appears that many
individuals who are diagnosed with dissociative disorders struggle to gain some
understanding from relatives and friends, and, needless to say, the wider community. In
addition, there are few professionals who recognise the existence of dissociative
disorders or treat them. In fact, eight of the nine participants had difficulty finding
practitioners who understood their condition.

It seems that many of the participants did not have close supportive family
relationships, and some had mentioned that they were physically and/or sexually abused
by parents or close family members. In particular, the respondents found that their
parents had difficulty accepting the reality of their mental illness. Susan_{(non-DID)} indicated
her father did not understand what happens to her, but she felt empathy from her mother
who also suffered a mental illness. Likewise, Louise’s_{(DID)} family of origin appeared to
have little insight into what life had been like for her and immediate family. Although
Louise claimed that they have been told, she felt they have no comprehension about her
mental disorder and its consequences. Similarly, James’s_{(DID)} parents were not close to
him, and consequently, they still did not know about the abuse perpetrated by his uncle.

For Wynne_{(DID)}, her mother was a perpetrator who controlled and sexually
abused her. She felt that if she was not dissociative, she would be able to defend herself.
In her mind, Wynne imagined what she wanted to say to her Mother: “Mum, I love you
very much, and I respect you and I’m grateful for the way you brought me up, but I have
to make my own decisions as an adult. ’ …Yes. Yeah, I’d have the character strength.’

However, her psychiatric disorder left her unable to do this.

Cheryl(DID), of all the participants, had the most to say about her parents. She
found them to be very unsupportive as a child and says, “I spent most of my childhood in
my room… and their understanding of me in my room was, I was reading.” But Cheryl
said, “…most of the time I would sit there talking to my imaginary friend, or cry…and
they were none the wiser...They would leave me alone. Mum and Dad were quite happy
to totally ignore me for weeks on end.” Even at the time of the interviews, Cheryl felt
invalidated, especially by her mother, and would not communicate with her about her
mental illness, although her mother said she wants to know. Yet, despite her perception
that “Dad was an absolute bastard when I was a kid…a very cruel man,” Cheryl has
since fostered a relationship with him and felt he has some understanding of the
dissociative disorder she suffers.

Overall, it seemed that the main story told by the participants was that their
parents were, at best, not there to support them, and at worst, horribly abusive. This in
turn, would have reinforced the need to dissociate.

Seven of the participants spoke about relationship difficulties with their partners
as a result of their dissociativeness. Vi(non-DID) bemoaned the fact that she stayed in an
abusive marriage for much longer than she would have liked because she was able to
dissociate from the pain of the abuse. Megan(non-DID), too, was divorced and raised her
three children as a single mother. She did not cope very well and felt that she also lost
friends as a result of the divorce.

Marlene(DID) lamented that her two marriages were badly affected by her
dissociative disorder. Her first husband committed suicide, and Marlene felt that her
dissociative condition contributed to his decision to end his life. She reflected:

I didn’t recognise for myself how seriously dysfunctional I was, it took many
years…there were lots of excuses why I was dysfunctional… There’ve also been
times in my life, particularly between the two marriages, when I went from being
frigid to being quite promiscuous and couldn’t understand why. So, in terms of
intimacy and sexual intimacy, there has never been a normal, and that, apart
from anything else, has driven me to say, “God, help. Why am I like this?”

Louise(DID) was the most vocal participant about how her dissociativeness has
affected her relationship with her partner and children. Her husband was not able to help
the children to understand what was happening as a result of Louise’s illness. She remembered when:

...my own family didn't want to know me. And I had to ring home [from rehabilitation] once a week for ten minutes - that's all I got to speak to my own family. My phone calls were listened to like I was some sort of criminal, and [my husband] couldn't handle it. He just completely withdrew.

There's been so many years of problems. Ever since [my husband] and I got married we've had major problems...[my husband] was just too busy surviving...to get through it all, so... I do feel very much to blame for the mess that the family's in...because of what I've been through and the illnesses I've had, and my inability to cope with them at the time.

Conversely, Wynne(DID) and James(DID) said they have happy marriages. However, Wynne felt that, at times, her relationship with her husband was affected by her dissociative condition “...when I haven’t been able to have a conversation with my husband when he’s raised his voice. That kind of thing. When I can’t relate to other people, when I have been so shy that I can’t say anything.”

The children of those who have a dissociative disorder are the innocent victims of their parent’s trauma. Louise(DID) and Megan(non-DID) both spoke about how their condition affected their children adversely. Louise recalled sadly:

That happened for years [her husband having to collect her when she switched to child alters]. And you can imagine the stress that it put on the family. That's why the kids blame me now for everything that goes wrong. I realise they're wrong, but at the same time there's also been a lot of damage done because of my illnesses...Yeah. You can't blame kids. That's how they grew up. Not that they were given any real [encouragement from husband].

Louise acknowledged that they all survived but “Yeah. Oh yeah. At what cost?...they don't want to know about anything about what's going on...” She felt helpless in that there was nothing she could have done to make it better or fix things for her children. However, on reflection, she felt she did the best she could; that they were all innocent victims of the perpetrators of the childhood sexual abuse. They have all paid a big price.

My kids will never forget how I acted at the time when it was diagnosed – being sent away and having a mad mother as they so call it. They like to blame everything on what I’ve done in their lives.
The cost was also high for Megan and her children. She believed that her blanking-out spells affected her relationship with her children, and she wondered, “What have I done? Raising them on my own so all that pain with me...I felt like I don’t know them any more.” The children lived with her through the rehabilitation after the workplace accident five years previous. Megan said “they were sad that they had to get used to this new Mum... But I didn’t think I was a new Mum, I thought I was still me, but they saw I changed a lot.” However, despite this they managed to make light of their circumstances. Megan indicated they were a close-knit family and enjoyed their time together. She laughingly recalled:

Yeah... tipping me out of my wheelchair in the supermarket, you know. They’d roll the food to me from the other end of the thing and say “Catch Mum”. Everyone would walk past and we’d all have a bit of a chuckle and play games in the wheelchair going up the [aisle]...because I didn’t have a lot of speech at that time and so they’d mock me. It was very funny, they were very, very funny...

Despite the closeness in the past, she now experiences friction with her children, especially her son who still lives at home. He becomes frustrated as he struggles to gain her attention:

And I didn’t hear. It’s like... “That was the first time”. “No, I’ve said it to you a few times”...But it’s the first time to me (laughs) you don’t have to tell me a lot of times, you know...and if I say to him, and he’ll say “Well, you’re deaf”...Yeah, but like I’ll say to him, “I’ve only just heard you, you just said it now”. And he’ll say “No, I’ve said it...” you know, and I’m saying “No, you’ve just said it once.” And then so, I get frustrated then...

Wynne has not told her children of her diagnosis and did not directly mention how her condition has affected her children. However, she suspects her son may also have a dissociative condition. She said regretfully:

...and I’m very sad in my heart to express the fact that I know that he’s dissociative too...like he was so incredibly brilliant at Mathematics that he won this...scholarship and advanced tuition in Mathematics, then all of a sudden he couldn’t do Maths at all and he was a complete failure. It was the one thing that he didn’t excel [in] at university. So it was almost as if he had an alter that was mathematical and then that alter disappeared and the rest of him had no ability for maths.
Not only did dissociation often hold negative implications for relationships within the family unit, the interviewees felt that it hampered their ability to develop relationships at a social level. While dissociation seemed to be a shield or defence, it was also apparent that the participants were more vulnerable to abusive relationships. Marlene(DID), Vi(non-DID), and Wynne(DID) mentioned that they were not able to defend themselves when unpleasant or bad things happen to them. They would “hide” but then could not defend themselves.

In particular, Marlene felt she was a target for abuse not only from relatives, but also others, because of the childhood abuse and dissociation. She felt:

_I was a target for perverts. Couldn’t understand why... even into my 30’s, my brother-in-law... came on to me when I was out one night... because you’ve got that wounding in your life, you become a target for people who are abusers anyway. And the things that I’ve remembered of my life, of inappropriate relationships, and... I’ve been targeted by perverts... But for years I know I walked around saying “Why is it that people like that target me?”_

Likewise, Wynne mentioned a wish to regain her voice and be able to stand up to others instead of disappearing inside to hide, saying:

..._if I had the strength... to stand up to people who are very... like this lady in the church who comes up and wants to pray for me, and I say, “I’m happy for you to pray for me, but don’t pray deliverance prayer.”_

Not only is it clear that Wynne feels the need to be more assertive, but her comment highlights the notion that people in the community (and perhaps more predominantly in religious communities) may misunderstand the condition, and thus, make matters worse.

A number of participants mentioned a deep sense of loneliness and lack of friends. Louise(DID) was one who found it very hard as her avenues of support were unwittingly cut away by a well-meaning minister:

..._It’s been happening for so long, even before the diagnosis, people didn’t know what was happening. They misunderstood me. They labelled me. People at [church] didn’t want to know me, because [the pastor] got up and actually told them that I had this MPD and that I need understanding, love, and support. And because there was no education with that announcement, people didn’t know how to handle me. They withdrew. They became critical... Instead of my [church]_
where I’d been for goodness knows how many years supporting me, they really
cut me out from underneath…

Cheryl(DID) also highlighted a lack of understanding from others about mental
illness resulting in the loss of friends. Nevertheless, she communicated a degree of
insight into how others perceived her and about mental illness in general. She reflected:

...I suppose it’s like years ago when nobody had ever heard of simple
depression. The lack of knowledge and the lack of understanding, as humans,
we’re afraid of things we don’t understand...Hmm. And that’s all it boils down
to. And I, for one, can’t blame anyone for feeling that way because, if the
situation was reversed, I’d probably be the same...So you’ve got to accept that,
as humans, we have a limited understanding and what we don’t understand
frightens [us]. And no-body likes to feel afraid.

Similarly, Megan(non-DID) had few friends because she felt they could not cope
with her, so she shields both herself and others from her condition.

...I haven’t got any real friends that know me, like I haven’t got any girlfriends
that...totally know me. I won’t let people know me...I don’t tell them. Like,
you’re a stranger and I find it much easier to say things, ‘cause I can’t do that
with my friends, because I think I’m going to lose them. And I think that’s sort of
happened all the time...and people get sick of all the stuff that’s been going on
since the accident. But you don’t...say anything. You just pretend everything’s
okay. Yeah (Tears in her eyes, but she laughs).

For others, it is not so much the lack of friends, but the inability to communicate
effectively. Samuel felt that “Socially, I’m not really able to communicate while it’s
happening...can’t interact well at all. So, that’s obviously a hindrance.” And Susan
found that:

It’s a hindrance during conversation; it’s a hindrance when I feel like there
could have been something more productive I could have done to help the
situation.... So, in the end, I know that it’s not going to help. But it just feels so
damn comfy not to be thinking of answers

8.9.2 Occupational Complications

A number of participants shared about the problems they have had in obtaining
and/or keeping paid work because of their dissociativeness. Although James(DID) was
perhaps one of the least affected in terms of employability, he found that his condition
was a hindrance. He noted, “...I can push as hard as I can push but often it just doesn’t happen. I’ve just got to go Ohhhhh...that’s what happened today and I’ll try again tomorrow.

In contrast, Susan_{non-DID}, was unable to maintain a job because of the amount of times she blanks out. However, she stated “I wouldn’t say it ever caused problems with work because I don’t work that often, and when I do it’s usually short, like, temporary jobs.” Instead, she helps her parents with the housework. Yet, even then she finds it difficult to maintain her focus, saying:

I try to keep myself busy. I try and keep myself employed...I think Dad gets frustrated because I forget to do a lot of things because I can't even remember being asked. Either that, or I've spent the day trying not to be staring all day, so things haven't gotten done.

Cheryl_{DID} also experienced problems keeping a job and living independently. Since her long-term switch to the alter, Protector, she commented:

I’m not used to being around for such long stretches of time and I... have made mistakes,...losing my job. That was the biggest one, in a lot of ways...I feel like I have stuffed up big time. I lost [Cheryl’s] unit, because I couldn’t pay the rent, because I’d lost my job.

As a result, Cheryl was compelled to live with her parents, and become dependent again.

Megan’s_{non-DID} tendency to “blank out” has resulted in her missing instructions given by her boss. She mentioned. “When I’ve been given instructions at work...that worries me, and I don’t even remember them saying it to me in the first place.” It was also apparent that her workmates did not understand her condition to the point where she felt the need to file a work place complaint about the way she was being treated.

8.9.3 Other Complications: Health Professionals

While the participants seemed to struggle with personal relationships, several also indicated a level of unease when dealing with mental health professionals. There seemed to be a common concern among some of the respondents, that their condition would leave them institutionalised. Initially Wynne_{DID} feared what professionals might do to her if they really knew what was happening to her:

...When I first went to the doctor, biggest issue I had was what.... I used to say “Don’t put me in the hossaple [sic]. I don’t want to go to the hossaple”, because I didn’t want any doctor to know that I had voices in my head, because I had a
great fear of being confined in a hospital. And I thought that if any doctor had found out, that that’s where I’d end up.

Megan\textsubscript{non-DID} had also suffered frustrating times as a myriad of professionals tried to provide a diagnosis, none of which were helpful. However, recently she found a supportive psychiatrist who she can talk freely with, “to say ‘Everything’s horrible today’”.

Louise\textsubscript{DID} was particularly cynical regarding the standard of care and help that had been provided for herself and her family. Specifically, she felt that the families were the forgotten ones in the process of treating the individual. She shared her observations:

See, when people give the diagnosis for DID to a patient, they don’t realise that behind that patient is a husband waiting for answers and solutions and usually gets nothing. There are usually kids that are very confused about why a person in the family is not functioning the way they should. I mean, they'll never forget that I used to sit down with fish and chips with them and I was like a third, kid in the family. And...that's played a huge role in them. It's made them very...ahh ... screwed up about me. Sorry, I've really prattled on.

Her apology seemed to reiterate the extent to which she thought professionals, such as the researcher, were interested in her thoughts. She was further disenchanted with the system when:

...for nine months I stayed at my Mum's place and ... I felt like a criminal, and all I'd done was move out of the house because [my son] had threatened suicide. [My pastor] called the...health services or something. They got involved. They wanted to take the kids out of our care and rather than have the kids taken out of our care, it was suggested that I leave the home for a period. So I did, I sacrificed my family and I went over [to a religious residential care unit], thinking that was the right thing to do, and I was abused in the process. And misunderstood... Yeah. It was just a really upsetting time, and it still hurts, unfortunately. ...And that has really affected our family's life, my not being there for nine months of the year ...I've got [my son] always saying "Oh it was so good when you weren’t here" and I know that it affected them in many ways.
Louise observed that she and others with mental health conditions are often not seen as people who require sensitivity and understanding by the professionals who treat them. She concluded, “Yes. They’re thick chart patients\(^\text{19}\). But, we’re people too.”

### 8.10 Experiences with Therapy

On average, the number of therapists seen by the nine respondents was 6.7. One of the respondents had only seen two therapists, while another had consulted 15 different mental health professionals. The respondents gave accounts of their condition prior to therapy, and they reported the therapeutic practices they found unhelpful along with what they felt was helpful. Finally the interviewees were asked to reflect on how/whether therapy had changed their experience of dissociation.

#### 8.10.1 Before therapy

All the respondents reported that their dissociative symptoms existed prior to seeking therapy. For Marlene\(_{\text{(DID)}}\), James\(_{\text{(DID)}}\), Samuel\(_{\text{(non-DID)}}\), and Wynne\(_{\text{(DID)}}\), it was these symptoms that caused them to seek therapy. Conversely, Louise\(_{\text{(DID)}}\) remembered experiencing dissociative symptoms when she was six or seven years old. Wynne was so concerned that she searched as far away as North America before she found a therapist who could help. Prior to seeking therapy, most of the participants disclosed that they knew little about dissociation. In fact, Susan had learnt more from the interview than from anywhere else. She responded saying:

...Well, [my understanding has] even changed just from today...I've heard of the word 'being disassociated' [sic]. I didn't know there was such a thing as ‘disassociation’ [sic]. I think that's what was interesting when I picked up your survey...Whenever I've tried to talk about it with someone in the past, psychiatrists, or psychologists or counsellors...just because, you know, memory loss, or short term memory, is just a symptom of depression, and that's the only thing I've been told.

On the other end of the spectrum, Marlene had been offering support to others who had DID and had read material relating to dissociativity and DID. It was her interest in this area that led to her suspicion she may be dissociative herself.

\(^{19}\) The term “thick-chart patients” refers to the inevitably large size of the medical and psychiatric files and dossiers that seem to accumulate before and after a DID patient is diagnosed.
For Cheryl, it was clear that something was wrong. She described her symptoms as “...very...intense...prior to starting to see [my psychiatrist], it was extremely obvious. There was the whole body changes, not just an attitude or a voice. There would be very distinct physical changes...”.

Megan, however, presented a different slant on what life was like before therapy. She felt she had no-one in which to confide. She observed: Before [therapy] I didn’t have any mechanism to [keep myself safe]...when I was really down... and now I know I can give him a ring and not feel guilty about it...

8.10.2 Unhelpful therapy

Eight of the nine participants reported having experienced unhelpful therapy. Indeed, they spoke about multiple therapists many of whom were unhelpful, even damaging. Misdiagnosis seemed to be a common thread. Both Cheryl and Louise reported being incorrectly diagnosed with schizophrenia. On the other hand, Susan was given many possible reasons for her symptoms, such as depression, while a dissociative disorder was not considered. Samuel also told of eight different therapists who had given him unhelpful strategies in an attempt to overcome his difficulties.

Many therapists and professionals were reported to have little or no knowledge about dissociation and the dissociative disorders. In fact, Louise found that “The psychiatrists don’t want to know about the DID,” and a number of respondents believed that psychiatrists were less helpful than psychologists.

Alongside the lack of professional knowledge, participants felt they were misunderstood by doctors and therapists. They were sometimes given poor information/advice about, and treatment for, their dissociative symptoms. Furthermore, Wynne and Louise reported being given abusive treatment that retraumatised them. Louise recalled her experiences with a religious organisation:

Yeah. Sometimes therapy was abusive. Especially what I got handed out at [rehabilitation] ...and the things that happened with [my pastor] in that first year, I mean he was flying by the seat of his pants. He was supposed to be working under [a psychiatrist’s] supervision, and he didn’t. ...He said, “Oh the Spirit was leading him!”. It might have been leading him but we ended up in some pretty hot water sometimes. I think it pretty-well burnt him out...

...and everybody felt that I was being sent [to rehabilitation] for my own good, and that I'd done something wrong. And ...after eight weeks I'd had enough, of
being abused spiritually, from the pastors thinking "what's this woman doing?" - not understanding me. I was in the wrong place... one of the girls kissed me on the lips and I said "I'm getting out of here."

8.10.3 Helpful therapy

Despite reporting many instance of unhelpful therapy, all but one participant (Vi) reported receiving therapy that helped them cope with their dissociative symptoms. In fact, Louise, notwithstanding the abuse she had suffered at the hands of some well-meaning, ill-informed people, found a competent therapist and: “Yep [therapy has helped]. It was bloomin’ hard. It was really hard, I tell ya. And there were times when I’m thinking “This thing’s worse than the disease itself”.

The participants spoke about a number of ways in which therapy was beneficial. For many of them, it was a relief just having a correct diagnosis for their problem, and having appropriate medications that were monitored closely. However, Susan(\text{non-DID}) commented that the simple monitoring of medication was not adequate: “I think that’s why I never got on with any psychiatrists. I didn’t feel like I was... it’s just like I was being monitored for the medication and that was all.”

Some of the respondents felt it was important to find a therapist who would fit their beliefs and bring God into the therapy process. Cheryl(\text{DID}) was adamant that, “I don’t know where I’d be without [my psychiatrist], and even stumbling into him was God, and God alone.” Similarly, Marlene(\text{DID}) echoed:

\begin{quote}
Yes, [therapy] has helped... just having somebody who acknowledges the reality of what you’ve been through, and affirms you and... encourages you, and... I think knowing other people that are walking a similar journey. Yeah it’s been... the most significant thing about therapy, from my point of view, is that [my psychiatrist] is a Christian and he believes in the power of prayer...
\end{quote}

Other participants felt a sense of relief that they could be themselves with their therapist or psychiatrist. And that being treated in a loving way brought healing. Megan(\text{non-DID}) also liked the safety of the therapeutic space: “Yeah, it’s a really good space... Yeah, I feel... safer there, and I don’t have to do anything for anybody.

Those who were diagnosed with DID felt that the acknowledgement of, and respect for, their alters was helpful. Louise(\text{DID}) says of her psychologist, “I felt that he really helped me and he really treated my personalities like people and really respected them. He even took the little ones kite flying one day...”. Likewise, Wynne(\text{DID})
appreciated the respect shown for her alters by her psychiatrist and his consideration for her faith in God.

For those who reported visits by other people through astral travel, closing the channels to the spirit world was believed to be crucial. Wynne(DID) and Marlene(DID) had both found this helpful.

Whilst the recognition of alters was an important first step, some therapeutic techniques were mentioned as being helpful. One technique, the development of an imaginary “board room”, was used to manage out-of-control/disruptive alters/voices. Louise reported:

[There were] lots of different voices all at once all wanting to express their opinion. We had to sort of get a board-room thing inside where we could let different people in at different times so we could just get who wanted to say what in an organised manner. That was one of the methods that my psychologist taught me.

The second technique that Louise found helpful was “the TV method”, which provided ways for handling flashbacks/painful memories. She explained:

...You just imagine the memories on a TV and you've got the remote control and when they're getting too much and its getting too overpowering, then you push the stop button and you can rewind them... Yeah. I found that very... quite good.

A further commonality was that, learning more about dissociation has helped in the therapy and healing process. Louise commented on the need for information and understanding:

I just understand it a lot better, and instead of seeing it as an enemy, I see it as a friend. I understand there’s a lot of people out there who suffer from it and they’re not insane, they’re not mad. They just need understanding and probably need support of other people who’ve been through it.

Finally, for James(DID), learning to develop new ways of coping meant that, “It happens to a lesser extent now because we’ve talked about different ways of coping with things”. For Vi(non-DID), who had no formal therapy sessions, developing her own way of coping was essential to her healing. She explained:

...I had a watershed. I had this remembrance about the rape, I chucked in my job in law, I became a hippy down in Gippsland for two years... I chucked it all in. I had one of my children back with me, which was really great, and I started to do all the weird stuff... you know, meditation, stuff like that, past life regression, on
myself...I don’t personally believe in other people doing it for you, but that’s just my belief...and yeah, that sort of started to get my shit together...for me to be happy enough with it, yeah..."

Several participants were able to articulate not only what was helpful, but how certain techniques or approaches had assisted them. On the whole, the data suggest that, having been provided with the tools to cope with the day to day demands of the disorder, the respondents were able to regain a sense of normalcy. As Cheryl(DID) found, it had given her more insight into herself, which in turn “helped in the day to day living, coping, being able to hold a normal conversation”. Therapy also enabled Susan to her approach to life. She disclosed:

...but I’ve changed my attitude, and been able to understand that I’m not dumb, I’m not stupid, I’m not unintelligent, which is what I thought I was at school... and I’ve learnt...that I’m able to look after myself afterward, or... not feel so guilty anymore.... So it has helped a little bit. It hasn’t helped it stop or anything, but it’s my attitude that’s getting changed

In contrast, Cheryl, James(DID), Louise(DID), and Wynne(DID), felt that therapy had helped them to reduce dissociative symptoms. Marlene(DID) had also seen improvements in her marriage, “…there’s the beginnings of intimacy with my husband...we’ve been married 17 years now, and it’s been pretty torrid, as you can imagine. He’s been through times of not wanting to be around and I don’t blame him.” Wynne and Marlene also commented on the healing nature of their therapy, which facilitated the process of becoming whole again.

8.10.4 Since therapy

A number of the participants had found some level of satisfaction with their recent therapy, and five of the participants noted some improvement since therapy began. Only two participants, Susan(non-DID) and Megan(non-DID), had seen no improvement in dissociative symptoms over the course of therapy (or time) as these were not addressed specifically in their therapy sessions.

However, for Cheryl(DID), the switching was more controlled and less obvious in public, while Wynne(DID) claimed she was coping better with triggers and was becoming more of a whole person. Samuel(non-DID) and James(DID) both felt that dissociation was less intense than before and James has found a rationale for his dissociative episodes. By
coming to terms with her condition, Louise\textsubscript{DID} could now choose when she wanted to dissociate rather than being controlled by it. She explains:

\textit{I have created [a craft room] option now. I’ve got that nice creative space to go and create. I thought that was a very positive thing to do, but now I need to make the decision when I get into that situation to go and use that rather than allowing something to come that I don’t really want there.}

Some participants were quite philosophical about all that has happened and about the therapeutic process. Cheryl\textsubscript{DID} was not as positive as some, but not necessarily distressed. She says:

\textit{I feel like I am in a tunnel and the proverbial light is closed down for repairs… So you just keep looking for a light. That’s all you’re doing… Yeah. [Therapy gives] you something that you can take that next step, or feel for the next corner, or whatever it is that’s ahead of you. It’s preparing you to take that next step.}

Similarly, Megan\textsubscript{non-DID} still has many unanswered questions. She seemed somewhat distressed as she pondered:

\textit{All those blank times, how can I stop them happening? So that I have some control. I feel like I have no control over all of this. I need that control back. I don’t understand that part of it… I get a lot of pat answers. It’s very complex. Even doctors don’t know, and I’m thinking there has to be someone else out there like that, there must be some studies. There must be. You just can’t leave a person dangling like, in no man’s land,… You’ve given me a diagnosis, then tell me more about it so I can cope or believe that that’s what’s happening.}

Conversely, Marlene\textsubscript{DID} and Louise\textsubscript{DID} seemed more positive and philosophical about their experiences than the previous two participants. For Marlene, her faith in God was crucial:

\textit{… and you start to appreciate that it’s not so much about what’s happened to you in your life, it’s not so much about what has been done or hasn’t been done, it’s who you are as a person and who you see yourself to be in [God’s] eyes and how you see yourself through His eyes that makes a difference. And so what people have done, and what you’ve done yourself loses it’s significance, loses its sting.}

Finally, Louise\textsubscript{DID} feels a level of healing and has come to a place where she would perhaps like to help others. She comments:

\textit{They’ve tried to tell me I’m cured… healed… Well that’s how I feel I am now. Which I think’s really good. But I’ve really worked on it from 1993 to 1995… I
really worked on it hard. So I've done the long yards... it’s the support you need and people who understand, I think, more than therapy. But I would never underestimate the power of what I’ve achieved through therapy, and I never would have believed how I could come this far.

8.11 Summary of Study 3 Results

8.11.1 Research Question 1: Describing Dissociation

Analysis of the interview data revealed that dissociation is both difficult to live with, and impossible to live without. Participants’ responses highlighted two broad types of dissociation: (a) an absence of connection with reality or an altered state of consciousness, which seems consistent with the idea of a detachment type of dissociation (R. J. Brown, 2006; Holmes et al., 2005); and (b) the presence of another state or personality, consistent with the compartmentalisation type of dissociation (R. J. Brown; Holmes et al.). Each of the participants reported experiencing the detachment type, but only those in the DID group reported experiencing the compartmentalisation type. Also of interest is that the participants seemed to describe two variations of depersonalisation, one within the category of absence of normal connection with reality and the other within the category presence of another state or personality.

8.11.2 Research Question 2: History of Dissociative Experiences

All interviewees reported experiencing dissociative episodes prior to entering therapy, and for some, this was what caused them to seek treatment. Most of them also reported experiencing childhood physical and/or sexual abuse, and only one could not remember much of his childhood, apart from some bullying at school. Not all participants had a sense of why they dissociate, but many of them expressed that trauma in their childhood and adolescent years helped them develop the ability to dissociate.

8.11.3 Research Question 3: Patterns and Processes

General patterns and processes of dissociative episodes were evident from the participants’ responses. According to them, the conditions for an occurrence of a dissociative episode usually involved an emotional response to either an internal or external trigger. External triggers included relational interactions, stressful situations, or environmental context stimuli, many of which are commonly experienced by all
humans, but without dissociating to the extent that the interviewees reported. Internal triggers were typically an overwhelming negative affect. At times, the participant reported being able to recognise an impending episode and avert it.

After a dissociative episode is triggered, the participants indicated that there are two dissociative responses. The first is total amnesia with loss of time for the entire time of the episode. Participants from both groups experienced this at times. What happens during this time is unknown unless the participant has left evidence of something they have done during that time, or if an external observer noticed a change in behaviour. The second is an altered state of conscious awareness with altered responses to internal and/or external stimuli. Again, what happens during this time may not be readily available to the participant, but is more available than when amnesic. Sometimes there may be external observers, who may or may not intervene.

The participants reported a number of ways by which an episode could be interrupted facilitating a transition back to a normal state of awareness. These could be either internal or external. Participants also talked about experiencing residual post-episode responses and the need for recovery time after an episode. The transition to a normal state of awareness was not always pleasant. This unpleasant experience was often magnified if there had been unhelpful external observers during the episode. The notion that dissociative episodes can be interrupted, and that the transition processes can be unpleasant, give important insights into possible strategies for therapeutic interventions. Implications of these findings are further discussed in Chapter 9.

When asked how dissociation helps or hinders, participants indicated that the dissociative episodes they experience are like a double bind. They do not like the fact that they lose time or have episodes of altered awareness. However, they also indicated that they could not have survived without it. There appeared to be a love-hate relationship with their dissociative ability. Some respondents shared heart-rending stories about how dissociation has affected their relationships and their ability to work. Yet, despite this, dissociation also helped them to cope with the stress of the adversity in the same areas of their lives.

8.11.4 Research question 4: Experiences in therapy

In relation to the final research question for Study 3, the interviewees shared that they had experienced a considerable amount of unhelpful therapy, and some had even been abused while in therapy. Many respondents had been misdiagnosed, although most
found that a correct diagnosis was very helpful in terms of enabling them understand
their condition and develop coping strategies. They also reported techniques that had
helped and those that did not. Some were even willing to participate in this current
research in order to help others. Most had seemed to come to some measure of
acceptance of their condition, and were continuing to work at increasing their well-being
and decreasing their maladaptive dissociativeness.

8.12 Conclusion

These interview participants’ stories add to, and support, the findings of Study 2
in that they endorse the traumagenic model of dissociation and also support the
quantitative findings that highlight the distress associated with dissociation, and perhaps
its roots in vulnerable temperament. There are also hints that support Study 1 and the
continuum model of dissociation, for example, Susan’s (non-DID) episode (in section
8.5.1.2) in which she exhibits a seeming presence of another state without being
diagnosed with DID. Participants’ stories highlight the fact that “borders” between
dissociative degrees of severity are blurred and not clearly defined. The Study 3 data
using IPA methodology also raises issues that were not, and could not, have been
uncovered using quantitative approaches. The following chapter presents the discussion
of the results from the three studies and presents methodological limitations, clinical
implications, and possibilities for future research.
CHAPTER 9
DISCUSSION

In this chapter, the results of the three studies are discussed according to the original research questions and in light of prior research. The findings are then discussed in relation to each other, followed by the project’s limitations and implications. Finally, further research areas are identified.

9.1 Summary of Research Findings

Overall, the results of the current project are consistent with the views of a dissociative continuum and of childhood abuse as a causal factor in dissociation. However, results of Study 2 and Study 3 also support positions such as the social cognition and psychodynamic views proposing that trauma is not the sole predictor of pathological dissociation. The model tested in Study 2, while indicating that there is a direct pathway between childhood abuse and dissociation, also indicated that personality, fantasy proneness, and resilience are directly related to dissociativeness. While reinforcing the view that trauma is a contributor to dissociative experiences, Study 3 participants told compelling stories of vulnerability juxtaposed with the ability to stay alive, and to grow. They also expressed paradoxical views about dissociation, in that, while they experience it as a pathological and unhelpful coping mechanism, they also experience it as helpful.

Before reviewing findings in detail, it is useful to recap the specific aims of the current project. The first aim was to test the hypothesis that a pathological dissociative taxon exists apart from normal continuous dissociation. Study 1 re-investigated, and expected to replicate, the findings of three previous studies (e.g., Waelde et al., 2005; Waller et al., 1996; Waller & Ross, 1997), which found evidence of taxonicity as measured on a subscale of the DES, the DES-T.

The second aim was pursued in Study 2. First, the study investigated possible predictors of dissociation suggested by prior research, particularly childhood abuse, personality, and fantasy proneness. Second, the study also explored whether the predictors of pathological dissociation are the same as those for normal dissociation. If they are separate phenomena, then the predictors would be likely to be different. These same models using the DES and DES-T were again tested with the CTQ sexual abuse
subscale as a predictor. Third, other related explorations were also tested: whether
fantasy proneness has a mediating role in the association between childhood trauma and
dissociation; whether resilience is a predictor of dissociation; and whether a model of
the predictors of dissociation differs with age.

The final aim of the current project pursued in Study 3, was to ask a selection of
Study 2 participants about their lived experiences of dissociation to commence
redressing the dearth of literature on this figural topic. There were four broad areas of
interest that guided the research questions for the third study. The first explored how the
participants described their different dissociative experiences. The second explored the
history of their dissociative experiences, while the third explored what happens in an
episode of dissociation and its impact on their daily living. The last, explored the role of
therapy in participants’ experience of dissociation.

The results for each of the three aims for the project are now presented
consecutively and discussed in light of prior research.

9.2 Results and Discussion for Aim 1, Study 1: Exploring the Latent
Structure of Dissociation

Using taxometric data analysis methods, Study 1 investigated whether a
dissociative taxon exists apart from the normal dissociative continuum. Contrary to
expectations, taxometric analyses did not provide evidence for a dissociative taxon
measured on the eight DES-T items. Nor was there evidence of a taxon based on a novel
set of nine amnesic indicators from the DES. The results for both sets of items showed
that the majority of curves in the MAMBAC and MAXEIG analyses favoured a
dimensional explanation. Few curves showed any evidence of the convex shape
indicative of taxonicity.

The results for Study 1 are inconsistent with the results of three previous studies
(Waelde et al., 2005; N. G. Waller et al., 1996; N. G. Waller & Ross, 1997). Indeed, this
is the first reported study using taxometric procedures to suggest that dissociation is a
dimensional construct. While there are researchers who view dissociation as a
continuum (e.g., Brenner, 1999) and those who view it as both a continuum and as
taxonic (e.g., Colin Ross, personal communication, 2003), the current results lend
weight to the continuum view, but open the way for further research and discussion
about this dilemma.
There are a number of issues to consider in light of this result. Perhaps one reason for the present finding lies in the sample characteristics, as taxometric procedures are particularly sensitive to sampling issues (Cole, 2004; Lenzenweger, 2004; Schmidt et al., 2004). In examining the sample characteristics, the following points are noted. First, this was an Australian sample and the three previous studies used North American samples. There were two sources of recruitment for the current Study 1 sample. One comprised all male Vietnam veterans and the other was a more heterogeneous sample\(^{20}\). Two samples from previous studies (Waelde et al., 2005; N. G. Waller & Ross, 1997) were comparable to one or the other component of the total sample used for the current study. The N.G. Waller and Ross sample consisted of 1055 from the general population (605 women, \(M = 44.4\) years, \(SD = 17.5\); 435 men, \(M = 41.6\) years, \(SD = 15.4\)), of which 75.9\% were born in Canada, 12.4\% in Europe, USA and USSR, and 11\% elsewhere. The ethnicity component is comparable to the second data set for Study 1, although the mean age is higher in the Waller and Ross study. Waelde et al.’s sample (\(N = 316\) all male, Vietnam veterans, \(M = 40.9\) years, \(SD = 4.79\)) is similar to the first data set for Study 1. Waelde et al. gave an ethnic breakdown, which showed 40\% were white, 28\% African American, and 32\% Hispanic. The mean age is likely to be comparable to the first data set from Study 1 because they are all Vietnam veterans.

The N.G. Waller et al. (1996) paper gave no ethnic breakdown. The greater part comprised a clinical sample from the USA and Canada and they gave a breakdown of numbers according to psychiatric clinic. There were 228 diagnosed with MPD. The normal population component (\(N = 415\), 25.4\%) was not screened for mental disorders. Some of the normal population component of the sample (\(N = 108\), 69\%) were considered separately from the rest because they were college aged 18-22 years old, and research has shown this age group has higher DES scores than others in older age brackets. The current study’s sample had a similar college age component, as well as a clinical component, albeit not as large as the Waller et al. study.

Another sampling consideration was that the Study 1 sample contained a sizeable youth component, which comprised approximately 25\% of the sample. Unlike the N.G. Waller et al. (1996) study, this group was not considered separately from the rest of the

\(^{20}\) No demographics were available for the veteran sample, but Chapter 7, section 7.3.1 and Table 7.1 provides these details for the second data set.
sample. Dissociative experiences are intrinsic to healthy adolescence and as a consequence adolescents and young adults tend to score themselves higher on the DES and A-DES (Armstrong et al., 1997; Ross et al., 1989d; Sanders et al., 1989), which could have enhanced the possibility of finding a taxon in the Study 1 sample.

Further, the gender balance was slightly different from previous studies. The final sample for Study 1 was 61.3% male and 38.54% female. However, the inclusion of more males than the N.G. Waller et al. (1996) study (approximately 70% female) should not have affected the results, as one previous study that detected a taxon consisted of an all-male sample of 316 Vietnam veterans (Waelde et al., 2005). Similarly, one component of the sample for Study 1 of the current project consisted of male Vietnam veterans. Furthermore, while N.G. Waller et al.’s (1996) publication did not present the gender split, it may be assumed that those with pathological dissociation were predominantly female on the basis of reports of two previous studies from which their data set was drawn (Carlson et al., 1993; Ross, 1997), so overall, their sample was probably predominantly female. N.G. Waller and Ross’s (1997) sample was 57% female. Due to these variations between samples it can be assumed that a different gender split was probably not responsible for the findings. Overall, taking into consideration all the sampling characteristics from previous studies and the current study, there appear to be no marked differences between them that would account for the different findings.

Another possible reason for the contrary findings is that the base rate in the current sample may have been too low to detect, yielding ambiguous and unreliable results (see Cole, 2004). However, the base rate for DID is likely to be low in a normal population (3%), therefore, the sample for the current project was collected in a considered way, that is, ensuring more than 10% inclusion of those likely to be in the taxon, but considerably less than the 50% that could give a false positive for a taxon (see Schmidt et al., 2004). The N.G. Waller et al. (1996) sample had at least a 50% inclusion of the target taxon population. They selected a subsample from their larger data set in order to conduct the taxometric analyses. Four hundred and fifty six were selected either on the basis of a DID diagnosis (n = 228) or as normal controls not screened for mental disorders (n = 228). It is not clear whether there were any highly dissociative individuals in the latter group. If so there would have been a greater than 50% inclusion of the target taxon population. This sampling method has since been criticised for possibly producing a false positive result (see Schmidt et al.).
The sampling technique for the current study resulted in a probable taxon membership of 13.3% in the sample when using the Bayesian membership cut-off score of .90 (see Appendix in N. G. Waller & Ross, 1997), and a probable taxon membership of 22.92% at the .50 cut-off point. Additionally, there was a clear demarcation between those who were above the .50 membership score and those below the .10 non-membership score. There were no participants in the range between .55 and .11 of the Bayesian scores, that is, there were 22.92% above .55 and 77.08% below .11. In addition, the sizeable PTSD sub-sample within the veteran sample did not seem to produce a mid range of Bayesian probability scores. Therefore, the sampling strategies should have supported finding a taxon if one was present.

Sample size should not be a consideration in the differing results. There is a contention that the lower the base rate of the taxon in the sample, the larger the sample needs to be to detect a taxon. The sample size for the current project (N = 602) is considered to be sufficient (Cole, 2004; Schmidt et al., 2004). Cole and Schmidt et al. suggest minimum sample sizes of 300 participants with at least 30 taxon members in the sample. In order to achieve the expected base rate for a particular phenomenon, Schmidt et al. suggest taking the sample from a population in which the taxon members are expected to be more prevalent than in the normal population. Combining two samples in the current project facilitated achieving these requirements as both samples together yielded more than the suggested 10% taxon membership.

Apart from the sampling considerations, a further difference when comparing these current results with previous studies is the use here of the updated statistical package by J. Ruscio (2007), with procedures designed to minimise the spurious detection of taxons arising from distributional artefacts. In addition, as recommended, multiple taxometric procedures were used here for external consistency (MAMBAC and MAXEIG), as were multiple valid indicators of dissociation (see Cole, 2004; Schmidt et al., 2004) as well as the use of simulated data. Therefore, in taking into consideration all these above factors it is concluded that the current research results are unlikely to reflect a false negative.  

21 However, in drawing this conclusion, it is noted this interpretation is not supported by some contemporary taxometric practitioners who would argue that the more conservative conclusion from the data would be that no decision is possible on whether the data is dimensional or categorical.
The results of Study 1 therefore add weight to existing concerns about the validity of the putative dissociative taxon (Leavitt, 1999; Merritt & You, 2008; D. Watson, 2003). Leavitt found that the DES and DES-T are strongly correlated, indicating they are not dissimilar constructs. The current project found the same with a correlation of $r = .93$, $p < .001$. Leavitt also argues that the DES-T produces false negatives for DID and is less accurate than using the DES, and does not generalise to other dissociative disorders. Merritt and You also found that the DES and DES-T were highly correlated, and the DES-T did not uniquely identify pathological dissociation in their sample. The current findings for Study 2 also add weight to these previous studies’ findings. The models predicting dissociation and pathological dissociation were the same apart from strength of pathways, consistent with there being no difference between the two constructs.

Other studies have raised concerns about consigning individuals to the taxon because results are not stable over time (D. Watson, 2003) and because different methods of assigning people produce different results (Goodman et al., 2003; Waelde et al., 2005). Some have also found that using the DES as a screening tool still produces results at least as reliable as the DES-T (Goodman et al.). In light of the fact that the current project did not find a distinct dissociative taxon, it follows that more research needs to be conducted with different indicators that might generate a more reliable taxon.

It seems there is confusion over which method is best to use in assigning individuals to a pathological dissociation class. In addition, Haslam and Kim (2002) are cautious about assuming that constructs in the personality or psychopathology fields are taxonic or not. They argue that dogmatic beliefs about continuity or discreteness cannot be sustained in the light of results so far. The preceding discussion, therefore, suggests that the present findings cannot be readily discounted and raises the possibility that a dissociative taxon does not exist, or exists in a different form. Additionally, Meehl (1992) suggests that the identification of a taxon within psychopathology and personality research will be a rare occurrence, and Widiger (2001) suggests it is more a matter of identifying the characteristics such as behaviours, beliefs, and attitudes that best define the taxon. Then there is the added theoretical implication that, if phenotypic dissociation is continuous, it is likely to arise from multiple causal influences rather than a single present/absent causal factor that determines category membership (Grove, 2008;
Meehl, 1992; Widiger, 2001). The findings in Study 2 lend weight to this suggestion. These are reported in the following section.

9.3 Results and Discussion for Aim 2 – Study 2: Exploring Predictors of Dissociation both Normal and Pathological

Study 2 investigated a number of predictors of dissociation and the results add incrementally both to the findings of Study 1, and to the current understanding of dissociation. Previous conclusions forwarding trauma, adjustment, and/or personality as predictors have seemingly been at odds. However, in the current data these variables were combined and reconciled in the developmental models tested. Each hypothesis and research question will be presented consecutively.

9.3.1 Hypotheses Related to Childhood Abuse and Dissociation

Hypothesis 1 predicted there would be a direct positive pathway from childhood abuse to dissociation and this was supported. Higher dissociativity, as measured by the 28-item DES, was correlated with more severe childhood abuse. These findings are consistent with the trauma model of dissociation, which argues that dissociation is at least partly caused by prolonged and severe traumatic events in childhood. These findings also align with previous research that reported childhood abuse was correlated with elevated levels of dissociative symptoms (Akyüz et al., 2005; Chu, 1998a, 1998b; Chu & Dill, 1990; Chu et al., 1999; Gleaves, 1996; Goodwin & Sachs, 1996; Irwin, 1999; Putnam et al, 1986). These results are at odds with conclusions that a trauma history does not predict dissociation (e.g., Elzinga et al., 2002), and call into question the extreme form of Spanos’ sociocognitive model (Barry-Walsh, 2005; Spanos, 1994, 1996; Spanos, Weekes, & Bertrand, 1985). It seems unlikely that the dissociative disorders are primarily a result of iatrogenesis in light of these findings.

Hypothesis 2 predicted that there would also be a direct positive pathway from the CTQ subscale sexual abuse to dissociation. This was supported. The results of Study 2 in relation to the association between childhood sexual abuse and dissociation

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22 While results for the 28-item DES are reported, analyses were also conducted using the 20-item DES, that is, the DES minus the 8-item DES-T. The results were similar for both sets of items apart from the total CTQ not being a direct predictor of dissociation for the DES20. All CTQ subscales yielded the same result for both the DES and DES20 (see Appendix D.2 for DES20 results).

23 Discussion of results for the other CTQ subscales are included in Appendix D.1
are consistent with studies that suggest that sexual abuse predicts greater dissociativity either within clinical (Chu & Dill, 1990; Chu et al., 1999; Kirby et al., 1993) or non-clinical populations (Briere & Runtz, 1988; Roesler & McKenzie, 1994). Other research that questions the association between childhood sexual abuse and dissociation is at odds with the current results (Mulder et al., 1998; Rhue et al., 1995; Romans et al., 1999). Rhue et al. found no evidence for a close link between sexual abuse and dissociative symptoms, but found evidence of greater dissociative symptomatology in those who were physically abused, which is not consistent with the current findings. However, they imply there may be other factors involved and this inference was backed up by results in the current study.

One study appears at odds with the current findings (Sanders & Giolas, 1991). While they used the DES and found that higher scores on the DES correlated significantly and positively with all types of trauma (physical abuse or punishment, psychological abuse, sexual abuse, neglect, plus negative home atmosphere), their sample was taken from a small adolescent inpatient population ($N = 47$) and they used correlation analyses alone to test their hypotheses. Correlation analyses in the current Study 2 also showed that the four types of childhood abuse were significantly associated with higher dissociation scores, however, the added utilisation of regression and SEM analyses showed that this association was not simple and other variables also play a role in dissociativity.

Comparing current results with prior research can be problematical unless sample recruitment is noted. The current convenience sample was drawn predominantly from a general population with the addition of a clinical component. Some study samples mentioned in this section are taken from normal populations and others from clinical populations. It is possible that clinical samples score higher on different types of childhood abuse than would a general population sample. Clinical samples are also more likely to score higher on dissociation, thus strengthening the possibility of finding a relationship between the different types of abuse and dissociation.

9.3.2 Research Question 1: Exploring Predictors of Pathological Dissociation

Research question 1, an exploration of the predictors of pathological dissociation, is presented here following the first two hypotheses because its findings are central to the examination of the construct of dissociation in the current project. These
explorations failed to show that pathological dissociation (DES-T) is substantially different from normal dissociation (28-item DES, and 20-item DES). There was a direct positive pathway from childhood abuse to pathological dissociation. Similarly, it was found that sexual abuse had a direct positive pathway to pathological dissociation.

In the SEM models, the results for the other three CTQ subscales also showed direct positive pathways from physical abuse, physical neglect, and emotional maltreatment to pathological dissociation. However, in the regression analyses conducted prior to the SEM analyses, only sexual abuse predicted both the 28-item DES and the 8-item DES-T. The other three subscales were not significant predictors of either scale. Therefore, only the sexual abuse subscale is reported here (see Appendix D.1 for discussion of results of other subscales, and Appendix D.2 for DES20 results).

In studies using clinical populations diagnosed with DID (Carlson et al., 1998; Carlson et al., 2001; Foote et al., 2006; Kirby et al., 1993; Loewenstein & Putnam, 1990; Putnam et al., 1986) it was reported that patients had extensive childhood trauma histories, such as sexual abuse, physical abuse, both sexual and physical abuse combined, extreme neglect, and witnessing violent crimes. Therefore, the current findings support these studies in that, current participants who endorsed items purporting to measure pathological dissociation also reported experiencing multiple types of childhood abuse.

A few studies have examined the DES-T in relation to the CTQ subscales similar to the current study (J. G. Allen et al., 2002; Goodman et al., 2003; Irwin, 1999). Goodman et al. found no associations between pathological dissociation and childhood trauma, which is inconsistent with the current findings. The current results are partially consistent with a study by Irwin (1999) who found that the CTQ predicted the DES-T but not normal dissociation (absorption). He also found similar results for the sexual abuse subscale, partially aligning with the current project results. J. G. Allen et al. also found that the CTQ and the sexual abuse subscale predicted pathological dissociation, but in addition they found that these variables were significant predictors of normal dissociation, thus aligning with current findings. However, these seemingly conflicting results may be because of different sampling methods. Irwin’s sample was from a general population while J. G. Allen et al. and Goodman et al. took their samples from psychiatric populations, demonstrating that caution needs to be taken in comparing methodologies and results from such diverse populations.
The current findings align with a study by Giesbrecht et al. (2007a) who tested the hypothesis that DES-T scores are uniquely related to trauma self-reports. They found that pathological dissociation as measured on the DES-T is not uniquely associated to trauma self-reports, nor is it unrelated to absorption and fantasy immersion. They concluded that the DES-T is perhaps not a reliable index of pathological dissociation.

A study reporting no significant differences between pathological dissociation taxon members and non members on any of the CTQ child abuse variables, either full scale or subscale also aligns with the current findings (Goodman et al., 2003). The current findings are also partially consistent with another study assessing taxon membership (Van Dien, 2001). Van Dien found that those in the pathological taxon reported being exposed to childhood maltreatment including child sexual abuse of longer duration, and physical abuse with harsher punishment, than did participants with normal levels of dissociation.

The current findings of the SEM models for pathological dissociation also endorse Armstrong’s (1994) views. She states that MPD (pathological dissociation) arises out of multiple types of abuse: that is, a childhood history of continuous and severe physical, sexual and emotional abuse, and not emotional abuse alone. However, she also indicates that emotional abuse and neglect may be at least as important as physical and sexual abuse in the development of some dissociative symptoms. Armstrong’s views are similar to the results of another study conducted in the Netherlands, which found that emotional neglect is an important factor in the development of severe dissociative symptoms in those who also experience childhood sexual and physical abuse (Draijer & Langeland, 1999). Therefore, the SEM models in the current study support the view that multiple abuse types perhaps contribute to pathological dissociative symptoms, that is, those participants who scored higher on the eight DES-T items tended to report experiencing a broader range of childhood trauma than those who scored higher on the more normative dissociative experiences (see DES20 results in Appendix D.2).

However, the current project’s findings also support research that suggests childhood abuse is not the only predictor of dissociativity. The relationship between childhood abuse and dissociation is more complex than indicated in many studies. A number of writers (Briere, 2006; Cima et al., 2003; Irwin, 1999; Stern, 1984; Waller et al., 1996) have questioned whether childhood trauma alone can account for the development of pathological dissociation. For example, Carlson et al. (2001) found that
perceived social support moderates the relationship between dissociation and violent sexual abuse. Therefore, there are other factors involved in the aetiology of dissociative disorders. Indeed, a prominent feature of sociocognitive and psychodynamic models is that characteristics of the person play a key role in explaining the propensity to dissociate. Several of the findings considered below are consistent with this view.

9.3.3 Hypotheses Related to Dissociation, Fantasy Proneness, and Personality

Hypothesis 3 predicted that there would be a direct positive pathway from N to dissociation. This was not supported. Instead, there was a strong negative pathway from N to resilience ($\beta > .7$). This pathway showed that more severe childhood abuse is associated with increased N scores, which in turn is associated with a decrease in resilience scores, which in turn is related to an increase in dissociativity. In addition, results for the second personality variable, A, tested in both regression analyses and SEM analyses, showed that A was a significant negative predictor of both the DES and DES-T in multiple regression analyses, but this direct effect was not significant in the SEM analyses. The personality trait A demonstrated only an indirect positive pathway via resilience and an indirect negative pathway via fantasy proneness to increased dissociation scores.

The SEM results demonstrate that a vulnerable personality was related only indirectly to elevated dissociation scores. The addition of resilience in the models mediated these pathways. Therefore, these findings are difficult to compare with previous findings of a direct positive association between N and dissociation (de Silva & Ward, 1993a; Goldberg, 1999; Groth-Marnat & Jeffs, 2002; Kwapis et al., 2002; Ruiz et al., 1999). Similarly, the current results for A are also difficult to align with prior findings of a direct correlation between A and dissociation (Goldberg; Kwapis et al.). In all the current study’s SEM analyses, N was only indirectly related to dissociation through resilience, and A positively through resilience and negatively through fantasy proneness. In addition, N was not directly associated with fantasy proneness, but indirectly through A to fantasy proneness for most of the models (an exception being when sexual abuse was used as an abuse predictor). Therefore, the present study, by adding resilience into the model, showed that other variables mediate these links. The addition of resilience illuminates pathways previously ignored.
The findings about associations between personality and fantasy proneness in the current research were mixed. There was generally no direct association between N and fantasy proneness, but there was a negative association between A and fantasy proneness. These findings did not support research by Sánchez-Bernardos and Avia (2004) who found that fantasy proneness was positively associated with both N and A. Their suggestion that fantasy proneness is maladaptive only partially aligned with current results. While the current findings suggest a positive association between fantasy proneness and dissociation, fantasy proneness was also positively associated with resilience and hence decreased dissociation. Future research could usefully tease out the mechanisms underpinning these two meanings of fantasy proneness in this context.

Hypothesis 4 predicting a direct positive pathway from fantasy proneness to dissociation was supported. This finding is consistent with previous conclusions that individuals who are more fantasy-prone are more likely to produce significantly higher DES scores than controls (Waldo, 1998). However, to measure fantasy proneness Waldo used the Inventory of Childhood Memories and Imaginings (ICMI) (Wilson & Barber, 1982, cited in Myers, 1983) that contains items correlating highly with the DES, which may account in part for his findings. Instead of the ICMI, the current study used the CEQ (Merckelbach et al., 2001), which was designed to reduce item and format overlap with the DES.

Comparisons with other studies using the CEQ are perhaps more relevant than the comparison with Waldo’s (1999) study. Higher levels of dissociation were associated with higher levels of fantasy proneness in a clinical sample (schizophrenia, BPD and MDD) (Merckelbach et al., 2005), and in an adolescent sample (Muris et al., 2003). The current results also perhaps add weight to the view that it is fantasy proneness more than trauma that predicts whether an individual is likely to be more dissociative (Merckelbach et al., 2001), because fantasy proneness was the strongest predictor of higher dissociation scores in most SEM models in Study 2.

The finding that fantasy proneness was the strongest predictor of dissociation supports the view of two further studies (Pekala et al., 2001; Pekala et al., 1999) arguing that fantasy proneness is as important as child abuse in the reporting of high dissociation scores. Additionally, studies that throw doubt on whether fantasy proneness is a ‘blanket’ predictor for dissociativeness are also supported by the current study (Candel et al., 2003).
However, there were also other variables that influence this link (see below, Research Question 2). The relationships between dissociation and trauma, fantasy proneness, personality and resilience are complex, and while trauma seems to be a contributing factor in those reporting higher dissociativity, it is not the sole factor. Fantasy proneness also appears to be an important vulnerability factor (Kunzendorf et al., 1997).

**9.3.4 Hypotheses Related to Child Abuse, Personality, and Fantasy Proneness**

Hypothesis 5 predicting a positive pathway from childhood abuse to fantasy proneness was supported. Also included was an exploration to examine if there is an indirect pathway from childhood abuse to dissociation via fantasy proneness. Results showed that, in these models, fantasy proneness mediated the link from childhood abuse to dissociation.

In relation to fantasy proneness and childhood abuse, the current findings showed that those who experience more severe childhood abuse also reported being more fantasy prone. This finding aligns with a study by Greenwald and Harder (1997) who found that fantasy proneness was associated with severe childhood physical abuse and punishment, and greater use of fantasy to block the pain of punishment. There is also some support for Bryant (1995) who found that those who were younger when sexually abused (prior to age 7 years), reported higher levels of fantasy proneness than did those who reported being sexually abused after age 7 years.

The current results are also consistent with other studies that found fantasy proneness mediates the link between trauma and dissociativity (e.g., Cima et al., 2003; Elzinga et al., 2002; Giesbrecht & Merckelbach, 2006). The current findings that fantasy proneness mediates the association between childhood abuse and dissociation also supports prior research by Geraerts et al. (2006) who found that there is a link between fantasy proneness, self-reported trauma and dissociation. Geraerts et al. argue that, apart from trauma, fantasy proneness contributes to dissociation, and that childhood traumatic events might foster fantasy proneness. However, Geraerts et al. also state they found “no support for the idea that dissociative symptoms can be fully accounted for by fantasy proneness” (p.1144), a view that is supported by the current research. Similar research by Merckelbach et al. (2002) is also supported. They found that dissociative tendencies were strongly linked to fantasy proneness, and, in addition, found that dissociation is
linked to trauma reports. While fantasy proneness seems to be a vital predictor in dissociativeness, in the Study 2 models its role is as a mediating factor between trauma and dissociation, and is perhaps one reason why not all those who experience trauma also experience greater dissociativity.

Hypothesis 6 predicting a positive pathway from child abuse to N was supported. In the related explorations, it was found that there was no indirect pathway from childhood abuse to N to dissociation, nor was there an indirect pathway from childhood abuse to N to fantasy proneness.

These results align with prior research arguing that there is a positive association between childhood trauma and N (A. Roy, 2002), but N was not found to be a mediator between trauma and dissociation as suggested by others (e.g., R. C. Johnson et al., 1995), nor was there a direct pathway from N to fantasy proneness. This last result is consistent with research by McRae and Costa (1997) but at odds with the findings of Sánchez-Bernados and Avia (2004). However, this pathway between N and fantasy proneness became significant when the CTQ subscales of sexual abuse was explored in relation to dissociation for both the DES and DES-T (see Chapter 7, section 7.7.2, models 7.5 and 7.6). This pattern was not identified for emotional maltreatment (see Appendix D.1) (this pattern was the same for the DES20, Appendix D.2). Therefore, these results indicate there is a complex relationship between childhood abuse, personality, fantasy proneness, resilience and dissociation that has not been fully explored previously.

**9.3.5 Research Question 2: Exploring the Role of Resilience**

All multiple regression and SEM analyses investigated the effects of resilience on dissociation within the models. Results showed that those who report being more resilient also experience less dissociation, both normal and pathological. While this is perhaps to be expected, the association between resilience and the other variables is interesting. As mentioned, the strongest pathway between any of the variables in each SEM model was the negative one between N and resilience. In addition, the association between N and dissociation was mediated by resilience.

Another interesting and unexpected finding was that fantasy proneness had a positive association with resilience. The indirect pathway from childhood abuse to fantasy proneness to resilience to dissociation showed an associated decrease in dissociation scores as measured by both DES and DES-T. These data suggest that there
is a way in which fantasy proneness may serve to increase resilience (and hence decrease dissociation), an important hypothesis for future investigation.

Resilience was included in the current project because: (a) not all individuals who suffer extreme trauma or hardship are incapacitated by psychopathology or a dissociative disorder (Chu, 1998b; Goodwin & Sachs, 1996); and (b) there appears to be no research that has addressed the associations this critical construct may have with dissociation, personality and fantasy proneness. Other studies have noted that not all who have suffered trauma go on to develop mental disorders. For example, Rhue et al. (1995) commented that only a small proportion of children who experience childhood sexual and physical abuse go on to develop dissociative disorders in adulthood, and another study found that social support and the ability to plan ahead predict less psychopathology (Hjemdal et al., 2006). Finkelhor (1990) also presented data suggesting that a substantial number of sexual abuse victims reported no adverse symptomatology. In some samples studied, up to 30% or more of victims reported no symptoms (Runyon, 1988; Cohen, 1986; Tong et al., 1987, cited in Finkelhor, 1990).

While it was to be expected perhaps that those who report being more resilient would be less dissociative, the current findings were also interesting in other respects. As was seen, resilience was found to be one of the links that has been missing in much of the prior research. As mentioned, the predicted direct pathway from N to dissociation was nonsignificant, but was mediated by resilience. This pathway from N to resilience was the strongest pathway in all models. Those who report experiencing childhood abuse and experience negative affect (e.g., fear, anger, sadness, and guilt), emotional instability and vulnerability, self-consciousness, and poor impulse control, are more likely to report being less resilient and thus more dissociative. These results give some support to prior findings that adults who were abused as children and who were more neurotic were much less likely to be resilient to adult psychopathology (Collishaw et al., 2007). In contrast, the pathway between N and resilience aligned with past research. Studies found that the N dimension accounted for a large proportion of variance (35%) in resilience scores (Nakaya et al., 2006), and that resilience is negatively related to N, and positively related to E and C as measured by the NEO-FFI (Campbell-Sills et al., 2006; Nakaya et al., 2006).

There is little prior research that specifically examines associations between trauma and resilience. Longitudinal studies with children (Werner, 2004), and cross-sectional studies with adolescents (e.g., A. J. Hunter & Chandler, 1999) have been
published. One longitudinal study (Werner, 1993) reported that many at-risk children grew up to be well adjusted adults, and suggested there are a number of protective and vulnerability factors that influence the outcomes of resilience. One of these protective factors, according to Egeland (2007) is an alternative supportive caregiver within the adverse environment, and the ability to trust. While the results were not reported above, the SEM models showed a positive association between A and resilience, suggesting support for Egeland’s view that if the child is able to trust and engage the social environment, they develop resilience.

9.3.6 Research Question 3: Exploring Age Differences

Many studies have found that dissociation scores decrease with age (Irwin, 1999; Ross et al., 1990a; Ross et al., 1989d; Spitzer et al., 2003; Vanderlinden et al., 1991; Vanderlinden et al., 1995; Walker et al., 1996). The current findings also showed a non-significant trend in this direction. However, there was a difference between age groups for reporting of childhood abuse in the current sample, with the older group (age 23-67 years) reporting significantly more childhood abuse than the younger (17-22 years) group. No prior research was found in relation to these findings.

Results for SEM age group analyses showed there was no direct negative pathway from childhood abuse to resilience in any of the SEM models except for the younger age group. For the 17-22 year old group, more reported childhood abuse was directly associated with lower resilience. This direct pathway was non-significant for the older group and the total sample. Another difference was the absence of a pathway from resilience to dissociation for the 17-22 year old group. Therefore the only direct pathways to dissociation for this group were positive pathways from childhood abuse and fantasy proneness. It seems the 17-22 year old group have no negative pathway from resilience to dissociation (i.e., no pathway showing that being more resilient is associated with a decrease in dissociativity). Further research could focus on this aspect to examine whether this is a further reason why adolescents and young adults report higher dissociation scores than do adults.

On the other hand, for the older group, there was an indirect positive pathway from childhood abuse to fantasy proneness to resilience, and a negative pathway from resilience to dissociation. Resilience, for the 23-67 year old group, then became the strongest predictor of dissociativity. This model for the older group differed from the model for the whole sample in that fantasy proneness was not the strongest direct
predictor of dissociation ($\beta = .31$). The strongest predictor was negative resilience ($\beta = -.44$). It is also interesting to note that, while the older group reported significantly more childhood abuse than the younger group, childhood abuse for the younger group was a stronger direct predictor of dissociation ($\beta = .24$) than for the older group ($\beta = .20$).

Therefore, in the current project, for the 17-22 year old group, resilience was not found to have a mediating effect between childhood abuse and dissociation. Those in the younger group with higher childhood abuse scores reported decreased levels of resilience. It has been difficult to find prior research with similar findings except for one reference to age differences in the reporting of stress/physical illness and hardiness (Brookings & Bolton, 1997). In that study, the younger group reported having no buffering effect or mitigating effect of hardiness on a stress/physical illness relationship. They also found only modest support for their expectation that hardiness would function prospectively to buffer the effects of stress on depression. Further research is needed to examine the mediating effects of resilience between abuse experienced and dissociation levels, especially in relation to age differences. One particularly interesting possibility is that the decrease in reported dissociation levels with increasing age may be a result of increased resilience in the older population.

In light of the results in the current study for the 17-22 year old group in regard to resilience, further research could be conducted to examine what resilience means for this age group. Hunter and Chandler (1999) raised the question as to whether resilience in adolescence is always a positive attribute or coping mechanism. They conducted a pilot study in a population of tenth and eleventh grade high-risk students from low income minority families ($N = 51$). One component of the study was completion of the Resilience Scale (RS) and another was collection of qualitative data. According to the RS data, the adolescents rated themselves as resilient, but qualitative data showed that resilience meant something else to these students than what was measured on the RS. To them, resilience meant surviving rather than having, for example, self worth or a healthy connection with supportive others. This study sample size, however, was small and needs to be replicated with larger numbers to see if the results generalise.

A study by Daigneault (2005) perhaps sheds some light on Hunter and Chandler’s (1999) view. In Daigneault’s study, adolescents showed areas of both resilience and trauma in that, in the area of memory they were able to give a relatively complete life story, but had difficulty linking affect with past events and they often had little or no meaning for past events. They also had difficulty assigning realistic meaning
to the trauma or to the self. It is perhaps this inability to access emotions and apply realistic meaning to past events, especially trauma, which decreases resilience. This concept requires further study to increase the body of knowledge about resilience in the youth population.

Past resilience research has tended to monitor populations at risk or who are ill, and little is known about the healthy well adjusted population in this younger age group (Ahern, Ark, & Byers, 2008). The younger group in the current study was comprised mainly of university students, who might be considered to be normal and well adjusted. Therefore comparing findings of the current study with past research has problems because of the disparity between samples. One view states that resilience may not be a static trait (Cicchetti & Garmezy, 1993), but more a process developed over time (Banyard & Williams, 2007; Richardson, Neiger, Jensen, & Kumpfer, 1990), that is, an individual can take active conscious steps to increase their resilience over time. The differences in results for the 17-22 year old group and the 23-67 year old group may just be an artefact of the current sample, but may also show that resilience for the younger group is viewed differently than for the older group. The view that resilience is a process has implications for clinical work with psychiatric populations. Resilience can be fostered in individuals to assist in decreasing their psychopathology, because resilience is not developed through the evasion of risk, but rather through successfully engaging it (Glantz & Sloboda, 1999; Rutter, 1987).

The results for Study 2 have implications for the categorical/continuous debate. While childhood abuse is associated with pathological dissociation, so are other predictors such as fantasy proneness and other personality variables such as neuroticism and resilience. In fact, fantasy proneness remained the strongest predictor of dissociation and pathological dissociation throughout the models. The models comparing dissociation and pathological dissociation showed the patterns to be similar, suggesting that pathological dissociation is not a construct that can be set apart from normal dissociation, thus adding weight to the findings of the continuum of dissociation in Study 1.

More importantly, there are implications for the debate between the trauma and sociocognitive positions. These two polarised positions are brought together in these results. While dissociation is partly explained by childhood abuse, there are also features of the person, including features that make them suggestible, that also contribute to dissociation. Elements from both models can be drawn upon to form a provisional
developmental model: that is, severe and prolonged traumatic events in childhood, coupled with vulnerable features of the person, can explain greater dissociativity. Adaptive features such as resilience can explain reduced dissociation.

From these results for Study 2, it can be seen that the links between dissociation, trauma, personality, and adjustment are not simple. Further research is required emphasising the role that resilience can play in reducing the effect of pathological dissociation on individuals.

9.4 Results and Discussion for Aim 3, Study 3: The Phenomenology of Dissociation

Study 3 was designed to address the gap in the literature pertaining to the processes and phenomenology of dissociation. It also gave a selection of Study 2 participants an opportunity to tell of their dissociative experiences. An overarching theme to come out of the data of all nine participants, whether they were in the DID group or the non-DID group, seemed to be that dissociation is not easy to live with, but it is also hard to live without. They experience a double bind; they love it and hate it at the same time.

Following is the summary of results for the four research questions in Study 3, and links to past research.

9.4.1 Research Question 1: Describing Dissociative Experiences

The first area explored how the participants described their dissociative experiences. Two superordinate themes emerged from the data for this section as participants’ responses highlighted two broad types of dissociation. The first theme was about an absence of connection with reality or an altered state of consciousness, and the second was about the presence of another state or personality. All nine participants reported experiencing the first type, but only those in the DID group reported experiencing the second type. The different kinds of dissociation described by the participants could conceivably fit along the spectrum of dissociation from the more mild absorption experiences, to depersonalisation, to the more severe amnesic episodes. It was also apparent that each individual experienced more than one type of dissociation.

Participants’ responses about the different types of dissociation experienced were consistent with the work of number of researchers (e.g., J. G. Allen et al., 1999; R. J. Brown, 2006; Holmes et al., 2005) that suggests there are two broad types of
dissociation, namely detachment and compartmentalisation. The first type of
dissociation described by participants was an absence of connection with reality or an
altered state of consciousness, which is consistent with detachment (e.g., R. J. Brown,
2006; Holmes et al., 2005). The second type is more consistent with
compartmentalisation, which was, according to the participants’ descriptions, the
presence of another state or personality (e.g., R. J. Brown; Holmes et al.).

9.4.1.1. Absence of normal connection with reality.

An absence of normal connection with reality or an altered state of consciousness
is consistent with the idea of a detachment type of dissociation (Brown, 2006; Holmes et
al., 2005). Butler (2004) describes it as a “psychological clutch” (p.4) that allows the
individual to disengage from a tense or active present reality. Within this category,
participants described a number of different types of dissociation: absorption (two
types), blacking out (two types), and depersonalisation.

The participants’ reports of dissociation as absence of normal connection with
reality align with prior research. They all gave examples of what are most commonly
recognised instances of non-pathological dissociation, that is, episodes of absorption,
such as daydreaming, imaginative engagement, meditation, formal hypnosis, and
pastimes such as reading an engrossing book or watching a riveting movie (Butler,
2004). While Butler argues this non-pathological dissociation does not form part of a
dissociative disorder, the participants’ responses seem to sometimes indicate otherwise.
For those with a dissociative disorder, what has been classified as normal dissociation by
Butler seems to sometimes become maladaptive, that is, they lose time or dissociate
more than is perhaps considered normal even when just absorbed in a movie (e.g.,
Cheryl). This overlapping of the normal with pathological experience is further evidence
of a dissociative continuum.

Instead, participants’ responses seem to align more with the notion of
detachment phenomena that exist along a continuum of severity, with associated
functional impairment (Holmes et al., 2005), ranging from milder states including
fatigue (e.g., Megan\textsubscript{(nonDID)}) to states of complete mental blankness (e.g., Louise\textsubscript{(DID)}). The participants also indicated that these experiences were accompanied by memory
impairment that seems to be of the type that is not encoded in the first place (J. G. Allen
et al., 1999). These descriptions of detachment demonstrated that detached memories are
not necessarily retrievable as suggested by prior research. The participants often knew
some event or part of a conversation was missed but they were unable to retrieve the memory. The memory for the event was not encoded for recall. There appear to be two types of absorption experiences, two types of blanking out experiences and one type of depersonalisation within superordinate theme 1.

Absorption. Voluntary and involuntary: The first type of absorption was more pleasurable and voluntary, and is seen by most writers and researchers as normal dissociation. Butler (2004) describes this as “actively sought dissociative experiences as escape” (p.5). This pleasurable type of absorption is akin to fantasy proneness, that is, an imaginative involvement or ability to set the theme and participate in an imaginative scenario while daydreaming or fantasising. It has the combined characteristics of a dream and a motion picture (Giesbrecht & Merckelbach, 2006; Levin & Spei, 2004; Wilson & Barber, 1983) and seems to be quite deliberate for some people, for example Louise(DID) and Vi(nonDID). They were able to imagine a pleasant scene and go there in their minds, shutting out their immediate, less desirable, environment. Others, for example Cheryl(DID) and Susan(nonDID), used the medium of film to take them to that place and they were able to become completely involved in the movie for various reasons. James(DID) also used books for the same purpose. In addition, Susan describes a “safe type” of dissociation that also seems to be absorption. She allows herself to experience this when the urge comes and it is a de-stressor.

The dissociative experiences the participants described while watching a movie align with the views of Butler and Palesh (2004). This absorption while watching a movie is part of normal dissociative experiences, and according to Butler and Palesh, film-makers deliberately create an environment to draw the viewer in so they feel part of the story. The term used by film makers to denote this process is called “suturing”, which suggests “a loss of psychological distance from the film and a suspension of critical reflection and judgement. When suturing is successful, viewers lose awareness of their surroundings and perceive the events on the screen as lifelike” (Butler & Palesh, p.65). This absorption and suspension of critical judgement is a critical part of pleasurable film going, and is akin to nonpathological dissociative experiences such as hypnotic states. Both Susan and Cheryl were extremely successful at engaging in this manner.

New research also suggests there is another type of intentional dissociative experience called “directed dissociation” (Edge, 2004). Edge describes this type of dissociation as being intentionally produced and is an interactive experience with
specific information, wisdom, or guidance being actively sought and obtained by the individual who has the experience. Butler (2004) also describes this type of experience as “passive dissociative experience as a forum for mental processing” (p.5). One of the nine participants describes a meditative dissociative experience similar to what Edge describes. Vi$_{\text{nonDID}}$ says,

I just get into one of my moods, and I withdraw and I will either appear to be sitting down reading a book...or else I will go up to my circle and try and have a meditate...[Afterwards] I feel lighter, and I feel clearer at trying to either accept the situation, whichever has brought it on, or...I’ve got a resolution to whatever it is. (Vi)

The second type of absorption appears to be involuntary and less pleasurable because of the loss of time associated with it. It is not necessarily pleasant, but not apparently linked to present stress or past trauma. Participants described this type as “blanking out” or their thoughts “being derailed” mid sentence when someone else is speaking (e.g., Susan$_{\text{nonDID}}$ and Samuel$_{\text{nonDID}}$). Megan$_{\text{nonDID}}$ described it as like being asleep for a short while and waking up not knowing what was happening. It has a feeling of unreality.

To summarise the absorption types of dissociative experiences, it seems that one is pleasurable and the other not necessarily pleasant. Therefore, some less pathological dissociative experiences are felt by the participants as being maladaptive because they miss out on vital pieces of information, resulting in their daily lives being hindered.

*Blacking out/blanking out/shutting down:* This type of detachment seems to be more pathological or maladaptive than the previous descriptions of dissociation. Louise$_{(\text{DID})}$, Samuel$_{\text{nonDID}}$ and Susan$_{\text{nonDID}}$ all described situations where they blanked out, or blacked out, that are associated with unpleasant memories and/or emotions. There is no known presence of another personality or state, but they describe feeling ill, or overcome with negative affect, and they then lose time. Susan and Samuel both also describe a disconnection between their minds and the external environment, and/or between the mind and the body when in this dissociative state.

Putnam (1997) argues that these time losses and blackouts, or sometimes “greyouts”, are hallmarks of dissociative pathology. He says those who experience time loss in this manner notice it in two ways: (a) they discover evidence of doing things they cannot recall doing, for example, like Susan does when she scratches her arm repeatedly while amnesic; or (b) they “wake up” or “come to” in the middle of an event, for
example, like James(DID) or Megan(nonDID) do when driving, or like Megan experiences when she finds herself in bed in the middle of the day. Louise, on the other hand, would find herself “coming to” in the bathroom after blacking out. These descriptions of a more pathological type of dissociation align with Leavitt’s (2001) results, which found that high imbalances of normal dissociation (> 30 on the DES absorption scale) may be related to general psychopathology.

**Depersonalisation as absence of connection with reality:** This third type of experience in the absence of connection with reality theme involves an out of body type episode where the participants saw themselves looking down on themselves while they experienced trauma. Vi(nonDID) also experienced different types with different kinds of trauma. She floated above during a rape and was beside, or cut off from her painful emotions in another. Megan(nonDID) did not see herself as part of her childhood abuse memories, and Samuel(nonDID) did not recognise himself in a reflection. With this type of depersonalisation/derealisation, however, there was no presence of another state or personality as there was in the depersonalisation description in the section below.

To summarise, blacking out and depersonalisation seem to be dissociative mechanisms that separate the participant from unpleasant or traumatic environments and are perhaps more maladaptive. Butler (2004) suggests that dissociation has become maladaptive “when voluntary phenomenal self-awareness is curtailed, when the full scope of internal and external reality is no longer engaged or accessible, when symptoms persist or reactions are overgeneralized” (p.4). According to a number of researchers (e.g., J. G. Allen et al., 1999; R. J. Brown, 2006; Holmes et al., 2005), these detachment types of amnesia are often irreversible as the memories are not retrievable. This relatively irreversible memory impairment is because of “a failure to encode ongoing experience associated with severe dissociative detachment” (J. G. Allen et al., 1999, p.160). Therefore, memories are not encoded in the first place. This is different from the compartmentalising type (see below) in which the memories are encoded but not readily retrievable.

**9.4.1.2. Presence of another personality or state.**

The second type of dissociative experience described by the participants was the presence of another state or personality. Only those in the DID group described these experiences. Some would suggest that conversion disorders fit within this category (e.g., R. J. Brown, 2006), but Megan, who had a formal diagnosis of conversion disorder,
firmly indicated that she did not know of the presence of another personality or state in her dissociative episodes, which also suggests a continuum of dissociative experience.

This type of dissociative experience seems consistent with the compartmentalisation type of dissociation described by a number of researchers (J. G. Allen et al., 1999; R. J. Brown, 2006; Holmes et al., 2005). Unlike detachment, the memories are encoded somewhere as episodic autobiographical memory, but not readily retrievable. Kihlstrom and Schacter (1995) explain this by suggesting that different identities or alters each have their own set of autobiographical memories that include “events and experiences that occurred while it was in control…[and] the alter egos are separated by a symmetrical or asymmetrical amnesia, which may prevent one personality from knowing the actions, experiences, or even existence of another” (p.339).

However, some participants in the current study had become aware of their memories over the course of time and were now able to retrieve most or all of their memories (e.g., Louise, and Wynne), supporting the view that memories are potentially retrievable when encoded in this way. Although memories had been forgotten for a number of years, they were now available for recall, for example, Louise’s trip to the Plaster House. Others, such as Cheryl, were still unable to recall much of their past, but other compartmentalised parts of themselves still contained the memory, for example, the alter Protector knew about events of which the host Cheryl is as yet unaware. Therefore, the participants’ accounts support the idea of the two types of dissociation, with some memories encoded in a way that makes them potentially retrievable and other memories not encoded at all.

One interesting finding to emerge in the analysis is that, though many might believe that the presence of another personality or state would automatically qualify as a maladaptive or pathological experience, it seems some of the participants (e.g., Wynne and James) did not experience this as always unpleasant or disruptive. However, others felt that it was maladaptive and disruptive, especially Cheryl and Louise. Following are the ways the participants described these experiences.

**Switching:** The switching definitions seemed to fit the compartmentalisation definition of dissociation. The memories are behind amnesic barriers and not easily retrievable. Cheryl, who calls it switching, perhaps epitomised this experience. Many of Cheryl’s memories were still compartmentalised, with amnesic barriers between the memories of different alters. Perhaps the best example of this was the description of
Cheryl missing her brother’s wedding. The alter “Protector” tried to make sure she saw some of the wedding, but said she was prepared for the heartbreaking moment when Cheryl realises she cannot remember that day.

In contrast, Louise indicated that she used to be like Cheryl, amnesic to many events, but the memories have now been retrieved and are part of her own autobiographical memory. They are no longer compartmentalised. Louise shows that, with time, the memories that have been compartmentalised can be accessed and become part of the host’s own autobiographical memories.

Putnam (1997) states that fragmentary autobiographical memory recall is a common problem in DID patients, and he suggests the impaired autobiographical recall is alter-personality-state-dependent. Some lose memories that span years and others for specific life events such as birthdays or holidays. Megan described this best when she said she felt like she had been asleep all her life and the day of her accident was the first day of her life. Since the accident she “feels stuff” whereas prior to that day she just “drifted through” important events. This description perhaps indicates that some of her experiences belong to this second type of dissociative experience described by the DID group participants, even though she denies the existence of other states or personalities.

Ray (1996) states that the discontinuity described by authors in relation to dissociation encompasses a number of areas. He argues that, while Braun (1988a) suggests the discontinuity relates to behaviour, affect, sensation, and knowledge, the APA definition (American Psychiatric Association, 2000) relates the discontinuity to identity, memory, and consciousness. Others have also added the somatic and behavioural control aspects of the dissociative process (e.g., Nijenhuis, 2000; Nijenhuis et al., 1999). The Study 3 participants seemed to endorse the view that there are disruptions in all these areas. For example, they described disruptions in behaviour, affect, sensations, knowledge, identity, memory, and consciousness. Participants also described interruptions in somatic control.

**Going back inside:** Going back inside seems to be similar to switching because when they go back inside another alter usually comes to the “front”. However, both James and Wynne indicated this could be voluntary sometimes, with no loss of time necessarily. Louise indicated that going inside used to be involuntary with loss of time and she, the host, would “play” with the others inside. She said she now deliberately goes inside, still with loss of time, but it seems to be to daydream to escape reality. Wynne spoke about going inside and watching as the alters played with teddy bears or at
the beach. James said he could go back inside and see all the alters, and the further back inside he goes the less he sees of the outside world. He continues to drive a vehicle even though he goes back inside. There was no prior research found that alluded to this term, but there was research about co-consciousness and switching with co-consciousness (e.g., Ross, 1997).

Marlene spoke about being co-conscious with the alters, and it seems both Wynne and James are also co-conscious. It also appears there can be one way co-consciousness, with only one personality aware of the other, or two way, with both aware of each other. These three participants indicated that for them, it is two way. For Cheryl, above, it is only one way at present, for example, “Protector” knows about Cheryl, but not the other way round. Therefore, there seems to be different forms of compartmentalisation and different degrees of access to memories of other parts, and different degrees of both host and alter being aware.

West (1997, p.13) defines co-conscious as “an alter or host’s awareness of another alter’s existence, presence, or experience at any point in time, or of the variable ability of one or more of these personalities to exert influence over another personality”. In addition, it is interesting to note that Estabrooks (1947, cited in Ross, 1997), like Hilgard (1977/1986), suggests every individual has a part of themselves of which they are unaware, and he calls it “another consciousness” that becomes apparent if an individual is hypnotised. He maintains this subconscious part is always co-aware. Hilgard, on the other hand, calls it the “hidden observer”. Therefore, what the individual with DID experiences appears to be a more pronounced form of the “normal” experience.

Depersonalisation with presence of another state: As above, this description of depersonalisation also indicates floating above, but this time with the presence of another personality or state who takes the abuse for the host person. When the person looks down at their body, they see another personality-state taking the pain. This could fit under the umbrella of compartmentalisation if the memories of the abuse were to be encoded with the personality experiencing the abuse and then kept separate from the host who watched. It is not clear whether depersonalisation is a type of detachment or of compartmentalisation. It seems that the memories are not lost as they are with detachment, and they may have been compartmentalised and then recalled at a later date. Vi (nonDID) certainly indicated that this was what she did when raped, although what she experienced may have been more repression than dissociation.
Of further interest is the fact that the participants seemed to describe two types of depersonalisation when faced with a traumatic event: (a) the first is to do with the absence of a normal connection with reality; and (b) the second includes the presence of another state or personality. There is scant research to date on depersonalisation and derealisation disorders, and none found that suggested there is more than one distinct type of depersonalisation as the participants described in Study 3. In addition, although the reported initial experience of depersonalisation type dissociation was different for different participants, there is no indication that subsequent depersonalisation experiences differ. This could be the subject of further research.

In addition, Irwin (2000) found that out-of-body experiences, which are akin to depersonalisation, are predicted more by somatoform dissociation than psychological dissociation. However, there appeared to be no obvious trend amongst the current nine participants that might support this link (see Table 7.1). The findings of Study 3, on the other hand, supported the views that depersonalisation plays a role in defending trauma victims from the full impact of traumatic events (Shilony & Grossman, 1993), and that interpersonal trauma is predictive of depersonalisation (Simeon et al., 2001).

Somatisation with presence of another state: Although a number of participants indicated by their responses that they met the criteria for somatisation disorder, only Marlene linked these symptoms with another state or personality as being the probable cause. Perhaps Megan’s conversion disorder diagnosis puts her in this category too, but she has no knowledge of distinct alter personalities or a sense that the memories are stored somewhere. However, the writings on detachment compartmentalisation put conversion disorder and somatisation within the compartmentalisation category (R. J. Brown, 2006; Holmes et al., 2005).

In summary, the participants indicated that they have both normal dissociative experiences and maladaptive dissociative experiences. An interesting observation to arise out of these participant descriptions is that the two broad types of experience (detachment and compartmentalisation) appear not to be independent. They both occur within the one individual and appear to overlap at times. In addition, pathology seems to be an orthogonal dimension, that is, both types of dissociative experience can be distressing or not distressing, even enjoyable. These descriptions also support the views of J.G. Allen et al. (1999), that is, some losses of time are not retrievable, and others are.
9.4.2 Research Question 2: History of Dissociative Experiences

The second area of interest explored the history of the participants’ dissociative experiences. Not all participants had a sense of why they dissociate, but seven of the nine knew that trauma in their childhood and adolescent years helped them develop the ability to dissociate. Eight of the nine reported experiencing childhood physical and/or sexual abuse. The ninth could not remember much of his childhood, but does remember some bullying at school. These reports are consistent with the traumagenic model of dissociation proposing that pathological dissociative experiences arise from more severe and prolonged childhood trauma (Akyüz et al., 2005; Chu & Dill, 1990; Chu et al., 1999; Irwin, 1999). In addition, none of the participants thought that their dissociativeness began as a result of experiences in therapy, thus disagreeing with the sociocognitive iatrogenesis view (e.g., Piper & Merskey, 2004a; Piper & Merskey, 2004b).

Two previous phenomenological studies have found that trauma is a major theme in participants’ reports of the onset of dissociative experiences (Legris, 1995; Stewart, 1991). In one study the overarching theme was of participants trying to protect themselves from past painful trauma memories and to escape from present events. The alters served this purpose of helping the participants escape the pain (Legris).

Four of the current project participants spoke about SRA as a reason for their dissociativeness. There is some prior research about SRA and ritual abuse (RA) and the effect this type of abuse has on children (e.g., Coons, 1997; Cozolino, 1989; Ross, 1995; Scott, 2001; Young et al., 1991), however, it attracted much criticism especially in the 1990’s in Britain and the US (e.g., Bottoms & Davis, 1997; Dyer, 1994). Some also suggest that, while patients believe the ritual abuse memories, they are often exaggerated or even fabricated in some cases (e.g., Marmer, 1997), but Fraser (1997) acknowledges there are dilemmas in working in the field of RA so he has learned to be cautious in accepting everything told him by patients while he accepts the possibility of RA.

Apart from the trauma stories, a number of the participants also spoke about fantasy experiences that helped them learn to dissociate, for example, Louise(DID) and Cheryl(DID) both had imaginary friends, and Louise recalls one of her friends taking the pain of the trauma. Therefore, Louise sees that fantasy played a part in the development of her dissociative disorder. This report supports research that indicates that fantasy
proneness plays a role in the development of dissociative disorders (e.g., Geraerts et al., 2006).

9.4.3 Research question 3: Patterns and Processes

The third area explored what happens in an episode of dissociation and its impact on participants’ daily living. A number of general patterns and processes were evident. From the participants’ responses it was noticed that a number of them were describing a process that happens before, during and after a dissociative episode. However, for two participants, James and Marlene, recalling what happens mid episode was difficult because the experience was so familiar to them it feels normal. This experience was also reported by participants in a prior study (Stewart, 1992).

9.4.3.1. Triggers and emotional responses.

According to the participants, the conditions for an occurrence of a dissociative episode usually involved an emotional response to either an internal or external trigger. They indicated that external triggers could be relational interactions, stressful situations, or environmental context stimuli, many of which are usually experienced by all individuals, but without dissociating to the same extent. Internal triggers were usually an overwhelming negative affect. Sometimes the participant reported being able to recognise an impending episode and avert it, but if that was not possible then a dissociative episode resulted.

These findings are at odds with research by Beere (1996a, 1996b) who suggested that triggers for switching to an alternative personality state were not so much strong affect or defence against intolerably negative states, but rather a battle for control between different personality states in which one loses control to a second. Because the present participants were not all diagnosed with DID, the results gave a unique insight into pathological dissociative triggering processes from a broader perspective.

In relation to emotional triggers, there is some research that links a trauma history with affect dysregulation. According to Cicchetti and Toth (1995), childhood maltreatment is associated with emotion regulation problems, and Yates (2004) argues that a developmental theory of childhood trauma suggests trauma has an effect on the emerging sense of self, affect regulation and impulse control, and relational patterns. Childhood trauma has the capacity to undermine the positive adaptation at each level of competence. While Yates used the trauma theory in respect to self harming, dissociation
could also be seen as a coping mechanism, in a similar way as self harm is seen as a coping mechanism, to regulate or cope in all these areas. The present participants reported that being overwhelmed by their emotions was a key trigger for their dissociative episodes. They seemed to use dissociation as an affect regulation technique when they were overwhelmed with emotion. This then affected all other areas of their lives (relational, occupational, educational, etc.).

Brenner (1999) also tends to agree that emotional triggers to past traumas promote switching as a defence against anxiety in the here and now. He states that it develops as a primitive, adaptive response of the ego to the overstimulation and pain of external trauma, which, depending on its degree of integration, may result in a broad range of disturbances of alertness, awareness, memory, and identity. Dissociation apparently may change in its function and be employed later on as a defense against the perceived internal danger of intolerable affects and instinctual strivings. (Brenner, p.841)

In contrast, Beere (1996a, 1996b) argues that switching is not linked to trauma or negative affect but to one alter’s desire to have supremacy over another. However, he does mention that the alters exhibit strong emotions at the time of the switch, so it appears it is difficult to separate the switch process from the emotion even in his accounts. Rather than switching being an emotional response, Beere argues that …switching occurs when reality events are proceeding toward a possible outcome of significance to a non-executive alter. As the outcome becomes more realizable, the non-executive alter becomes more energized and might influence the executive alter covertly to increase the likelihood of the outcome. When the outcome might really occur, intensity exceeds a threshold for the current executive alter and the non-executive alter takes control of the body. The process appears to be a loss of control for the prior alter and an assumption of control by the second. The results suggest that identity is a more significant factor in switching than state or emotion. Switching seems not solely a defense nor a mechanism to cope with intolerably negative states. (Beere, 1996a, p.48)

The current project was not concerned so much with the phenomenon of switching as such but more with the process of an episode of dissociation even if there are no apparent alters to switch to. Nevertheless, Beere’s work is of interest to contrast with the current findings because one participant in the current project (Cheryl) intimated something akin to Beere’s claims. Cheryl seemed to indicate by her dialogue that there
was this “intensity [that] exceeds a threshold for the current executive alter” (Beere, 1996a, p.48) in order to create the opportunity for the non-executive alter to take charge, but she also indicates that she is stressed at the time. Therefore, it appears an emotional context allowed the changeover even though it might be for the reasons Beere gives:

...I [Protector] got...I get to the point where I need a break, and it’s usually ‘Vicious Slut’ that takes over from me. And I knew at the time that... it desperately is...I did need a break, now was not the time to do it, and I don’t know exactly what happened, but I’m only marginally stronger than ‘Vicious Slut’ in will power, and she just caught me at the precise right moment to take control, and she had a one night affair.

9.4.3.2. Phenomenology of dissociative episodes.

Participants indicated that after a dissociative episode is triggered, there are two possible outcomes. The first is total amnesia with loss of time for the entire time of the episode. Participants from both groups experienced this at times. What happens during this time is unknown unless the participant has left evidence of something they have done during that time, or if there is an external observer. The second is an altered state of conscious awareness with altered responses to internal and/or external stimuli. Again, what happens during this time may not be readily available to the participant, but is sometimes more available than the first outcome. Sometimes there are external observers as well, who may or may not intervene for either pathway.

The participants reported a number of things that interrupted episodes and helped to transition back to a normal state of awareness. These could be either internal or external. Participants also talked about experiencing residual post-episode responses and the need for recovery time after an episode. The transition to a normal state of awareness was not always pleasant. This unpleasant experience was often magnified if there had been unhelpful external observers of the episode.

9.4.3.3. The double bind.

When asked how dissociation helps or hinders, participants indicated that the dissociative episodes they experience are like a double bind. They did not like the fact that they lose time or have episodes of altered awareness. However, they also indicated that they could not have survived without it. So there is a love-hate relationship with their dissociative ability. Some participants had heart-rending stories about how
dissociation has affected their relationships and their ability to work, and yet, even though dissociation had adversely affected them in these areas, they reported it also helped them cope with the stress of the adversity in the same areas of their lives. One prior study also found a similar theme emerging from participants’ accounts of the lived experience of dissociation (Stewart, 1992).

9.4.4 Research Question 4: Experiences of Therapy

Research question four explored the role of therapy in participants’ experience of dissociation. All nine reported experiencing dissociative episodes prior to entering therapy, and for some, this was what caused them to seek treatment, for example, James_{DID} and Samuel_{nonDID}. These findings support prior research by Ross, Norton, and Fraser (1989b) who gathered data from 227 clinicians across Canada and the USA about their MPD patients in order to ascertain if iatrogenesis is a cause of MPD. They concluded that iatrogenesis was not the primary cause of MPD. Kluft (1989) indicates that new alters may be created in an already diagnosed DID patient if the therapist is inexperienced or uses inappropriate techniques, and Ross (1997) states he has seen pure iatrogenic cases of MPD, but there is usually no history of chronic, severe dissociative symptoms prior to coming to therapy, such as was the case for most of the Study 3 participants. They reported that their symptoms existed prior to seeking out therapy and those symptoms were what made them seek out therapy.

Participants also reported experiencing unhelpful therapy, some even received abusive therapy. Some had been misdiagnosed at first, but also reported that a correct diagnosis was very helpful. There is much now written about treatment of the dissociative disorders (Braun, 1986b; Chu, 1998b; Fine, 1999; International Society for the Study of Dissociation (ISSD), 2005; Kluft, 1988; Putnam & Loewenstein, 1993; Ross, 1997), including for children (International Society for the Study of Dissociation (ISSD), 2004; Kluft, 1986; Silberg, 2004). However, Ross (1997) states that those with a dissociative disorder often receive many other diagnoses prior to being diagnosed with a dissociative disorder and they often meet DSM-IV criteria for 10 or more diagnoses simultaneously. The dissociative disorders are often comorbid with other disorders such as, depression, anxiety, somatisation disorder, and borderline personality disorder, and DID can be confused with bipolar disorder because of changes in personality, and with schizophrenia because of the internal voices. Therefore, the experiences of those participants who received numerous diagnoses, while distressing, is not unusual.
Participants were also able to report what had helped in therapy and what did not. Usually having their experiences accepted and validated helped, and the opposite did not. Those with DID found it especially helpful once they found a therapist who respected the different alters and worked with them as well. Participants also found it helpful to learn more about their dissociativeness, what it means, and how to cope more effectively in everyday life. A number of them mentioned how dissociation was not the best way to cope, but it was the easiest way for them.

This section on experiences in therapy not only highlights a need for medical, psychiatric and psychological professionals to take further training with regard to both the diagnosis and the needs of dissociative patients, but also in terms of helping the families of the patients to understand and cope with the condition. Furthermore, there seems to be very little information available for communities regarding dissociative disorders. Consequently, the sufferer is isolated and misunderstood by the people to whom they would normally turn for help.

Some participants mentioned that they were very willing to participate in this current research so others can be helped. Overall, most had seemed to come to some measure of acceptance of their condition, and were continuing to work at increasing their well-being and decreasing their maladaptive dissociativeness. Only one was an exception (Megan). She found her current condition very difficult to accept.

9.4.5. Further Comments about Study 3 Results

Hearing voices (or auditory hallucinations) is often included in the phenomenology of DID (e.g., Dell, 2002; Putnam, 1997; Ross, 1997), but the participants in the current project only alluded to these in passing. For example, James spoke about the noise in his head from all the conversations between alters, Cheryl said she would not miss the voices when she is well again and they are gone, and Louise said she does not notice them anymore. This theme, however, was not within the parameters of the current project to explore, and questioning in the interviews did not expand upon these experiences with the participants.

One paper that researched voices (Hayward, 2003) suggested that those who hear voices relate to them in much the same way as they relate to others in their external environments. James indicated that he had this experience, but he mentioned that the rules on the inside were different from the rules in the external environment. A further phenomenological study asked participants about their experiences of hearing voices but
the participants had been diagnosed with schizophrenia (Knudson & Coyle, 2002). The hearing of voices for those diagnosed with DID is one aspect that perhaps warrants further phenomenological study.

Another area arising out of the current project is that of the possible relationship between somatoform dissociation and childhood trauma. Four of the nine participants met the DSM-IV criteria for somatisation disorder. This is consistent with prior research (Nijenhuis, Spinhowen, Van Dyck, van der Hart, & Vanderlinden, 1998; Nijenhuis et al., 2002; Nijenhuis et al., 2004) suggesting that physical and sexual trauma predict somatoform dissociation especially when it occurs in an emotionally neglectful and abusive social context and there is bodily threat.

9.5 How the Studies Intersect

The overarching aim of the current project was to improve our understanding of dissociation within an Australian sample. The richness of the dissociative construct has been demonstrated in many ways throughout this project, and the highlight of the project is the multiplicity of dissociation demonstrated in the three studies: first, in its conceptualisation, second, in its aetiology, and third, in its process. While the three studies were designed as relatively discrete, there are a number of areas in which they intersect or speak to each other.

9.5.1 Studies 1 and 2

Study 1 results indicated that dissociation is best viewed as a continuum, with the inference that there are perhaps multiple causal influences in the development of a dissociative disorder rather than a limited causal nexus (Grove, 2008; Meehl, 1992; Widiger, 2001). The fact that Study 2 found multiple predictors of dissociation adds weight to the Study 1 findings of a dissociative continuum. Severe and prolonged child abuse has been, to date, the most cited causal factor, but SEM models in Study 2 demonstrated that fantasy proneness perhaps has a stronger influence on its development along with vulnerable personality. Another indication that dissociation is perhaps a continuous construct is that the predictors of both dissociation, as measured by the DES, and pathological dissociation, as measured by the DES-T, were found to be essentially the same.
9.5.2 Studies 1 and 3

Study 3 results suggest that if a pathological taxon exists, it does not align neatly with key markers (e.g., DID diagnosis, taxon membership as estimated by N.G. Waller et al., 1996, high DES scores, homogeneity of phenomenology, or consistency within individuals). Study 3 results also support the findings of Study 1 insofar as there is a complexity in assigning participants to a pathological dissociation class or taxon. Participants in Study 3 all met DSM-IV criteria for one of the dissociative disorders according to the DDIS (see Table 8.1). Leavitt (1999) criticised N. G. Waller et al. (1996) for using only those with a DID diagnosis for their putative taxon sample, and suggests the taxon, if it exists, is broader than DID. In study 3 all dissociative disorders were represented and all but one participant belonged to the pathological taxon according to the Bayesian probability cut off score of .90. However, that one participant was diagnosed with DID according to the DDIS (Ross et al., 1989a), which shows that the Bayesian probability taxon classification method (N. G. Waller & Ross, 1997) is not always accurate, as also suggested by other research (e.g., Goodman et al., 2003; Modestin & Erni, 2004; D. Watson, 2003).

Each of the participants also indicated that they experienced different types of dissociation at different times, some maladaptive and some not. It would be difficult to place them in a taxon based on just one type, but it seems that the cumulative effect of dissociative experiences from normal to pathological adds up to high dissociation scores. The question, then, is whether they belong to a taxon on the basis of one type, or because of the cumulative effect, or because of a narrow set of items on a scale. In addition, Schneiderian symptoms (hearing voices) are considered part of the dissociative taxon, and eight of the nine reported experiencing these phenomena. However, not all were diagnosed with DID according to the DSM-IV classification system as not all experienced these voices as belonging to another personality separate from their own personality.

As mentioned, Study 3 also adds to the idea that pathological dissociation is more than the most extreme dissociative disorder, DID. It includes any of the dissociative disorders, and perhaps sometimes what is classified as normal dissociation, e.g., absorption can also be maladaptive if the absorption is too deep. For example, Cheryl was totally absorbed in a movie plot to the point where she was “in” the movie even while not watching it, and lost sight of her environment completely. She was
“sprung” by her niece while acting out the film roles, and she had to reorient to her surroundings.

Another complex issue is the different methods of assigning individuals to a pathological dissociative class. On a practical note, in order to create a criterion for inclusion and achieve a homogeneous group for qualitative analysis, all participants had to exceed the cut-off score of 30 on the DES. After inclusion, eight of the nine were found to belong to the putative pathological dissociative taxon (N. G. Waller & Ross, 1997), and five met the DSM-IV criteria for belonging to the DID group, thus creating two groups who were not necessarily homogeneous.

Furthermore, all had experienced difficulties because of their dissociativity, yet for different reasons, and once they completed their interviews, it was apparent there were many differences between them. Some of those diagnosed with DID had very different stories from those not diagnosed with DID. In addition, the participant diagnosed with a conversion disorder (Megan) was very different from all the others, yet she had a high score on the DES and had a score greater than .90 when assessed using the N.G Waller and Ross (1997) Bayesian probability program. These sampling issues serve to highlight the problem as to how to classify pathological dissociation, especially if it is expected that those who belong to the taxon are more likely to meet the diagnosis of DID. Therefore, Study 3 highlighted the complexities of classification issues raised in Study 1.

9.5 3 Studies 2 and 3

Results from both studies 2 and 3 showed that childhood abuse has a part to play in the development of high dissociation and indicated that DID is probably not solely generated by iatrogenesis. Study 2 participants indicated that there were multiple predictors of dissociation, which included childhood trauma, and the Study 3 participants’ stories emphasised this point. They knew when they started to dissociate and seven of the nine have reasons why, other than it developing iatrogenically. They said they began dissociating as a result of abuse in their childhoods, not as a result of therapy, and some indicated a childhood fantasy world also contributed.

The stories told by participants of dissociative episodes and their triggers highlighted their vulnerability. For example, Cheryl and Louise reporting feeling that their dissociation was out of control much of the time when younger. However, as they learn new ways of coping other than going to dissociation, they become more resilient
and able to resist using dissociation as a way of coping. Louise stated she learned methods of stopping flashbacks by using her well developed imagination (fantasy proneness) to imagine her memories like a movie that she controlled, thus decreasing the times she dissociated.

Findings from Study 3 also throw light on some of the novel complex pathology identified in Study 2 modelling analyses. Louise provided the following example of two Study 2 SEM pathways: (a) from trauma to fantasy proneness to increased dissociation; and (b) from trauma to fantasy proneness to resilience to decreased dissociation. At times she allowed herself to lose time and at others she used her more directed imagination to decrease dissociation. Prior to the following extract Louise spoke of an initial trigger of family discord, and then she says:

[First pathway]...I ‘spose when I kind of give up and walk to the back bedroom and lie down that’s almost like giving up and saying “what will be, will be”, type of thing. [Second pathway] And that was something I felt I wasn’t going to do, and that instead, I was going to go to my craft room and create rather than admitting defeat, lying down...Sometimes things just get so bad that I’ll just go out there [bedroom]. And other times when I think that I can cope better, I’ll go and create. It just really depends on the moment...But I have created that option now. I’ve got that nice creative space to go and create. I thought that was a very positive thing to do, but now I need to make the decision when I get into that situation to go and use that rather than allowing something to come that I don’t really want there...I used to go to my bedroom a lot more. Now I tend to go to my craft room a bit more...it can DE-stress me to be making craft and be creative. I can lose myself in that, but I think it’s a losing yourself in that which is healthy, and although I might lose time doing it, it’s nowhere near the same time I might lose daydreaming about a tropical island, and being right away from the family and the mess and... everything like that, so...

This report accords with the findings of study 2 suggesting that resilience plays a role in decreasing dissociativity. Chapter 3 defined resilience as “the ‘successful’ adaptation to life tasks in the face of social disadvantage or highly adverse conditions” (Windle, 1999, p.163). Some of the items in the resilience scale (See Appendix A.5) are such things as: making plans and following through with them; taking things in stride; keeping interested in things; and life having meaning. Louise demonstrated this type of
resilience and adaptation in the above excerpt. However, a crucial point she makes is that she needs to make that choice. Wynne also said

“I have to learn a different way of living. There has to be a way that other people cope with stress and trauma and, you know, that’s at the end of your path of the healing of the dissociation. There has to be a way of learning how to live your life without dissociating.”

In prior research, Valentine and Feinauer (1993) found there are a number of experiences that sexual abuse survivors see as helpful in assisting them to overcome the trauma of their early abuse. These were: (a) the ability to find emotional support outside the family; (b) self-regard or the ability to think well of oneself; (c) religion or spirituality; (d) external attributions for blame and cognitive style; and (e) an inner directed locus of control emanating from internal values rather than directions and expectations of others.

The Study 3 participants exhibited a number of these aspects of resilience. For example, (a) Cheryl and Wynne mentioned friends who helped. Cheryl had a friend who supported her...”she came to the sessions at [psychiatrist’s] with me to be my support person. In the very beginning, I had a tendency to suddenly become violent, and she was the only one that could keep me in line”; (b) Wynne also showed the ability to think well of herself, “I’m more of a person. It’s interesting, my pastor says, ‘To what do you attribute the change in you?’; he said, ‘You just radiate now’. ‘Cause before, I was this little shrunk-up personality”; (c) religion or spirituality was mentioned by some participants as being helpful; (d) Louise was able to see the perpetrator was to blame for the abuse and she said “I just happened to be in the wrong time, the wrong place”; and (e) an inner directed locus of control was demonstrated by Louise in the previous excerpt about her craft room.

Other Study 3 participants also illustrated the pathway from childhood trauma to fantasy proneness to increased dissociation. They indicated that their ability to fantasise helped them to dissociate from their traumatic surroundings. For example, four participants reported they had imaginary companions (IC’s) as children, and used their fantasising ability to reduce stress. One researcher (McLewin & Muller, 2006) indicated that those who develop dissociative disorders often have more IC’s than normal, they are usually retained for longer, there is persistent impersonation, and the IC’s functions are complex and included protective roles, bearing of pain and keeping secrets. Both Cheryl and Louise spoke about different aspects of IC’s in these ways, suggesting that they are
more highly fantasy prone and predisposed to developing DID, according to McLewin and Muller.

Findings in both studies also indicated there were age differences. Study 2 found age differences in the way individuals report dissociation and its predictors, that is, the younger group up to age 22 years said they experienced less trauma than the older group, but the trauma they did experience decreased their resilience levels and increased their dissociation levels. Similarly, the two youngest Study 3 participants (Susan, 24, and Samuel, 20) were unable to report specific childhood abuse that they saw as underlying their dissociativeness. They had little memory for childhood abuse. This was in contrast to those over the age of 30 years most of whom had a definite sense of the aetiology of their dissociativeness, and who remembered childhood abuse. Megan perhaps stood apart from the rest of the older group in not knowing why she has developed a conversion disorder, although she knew the onset of her recognised dissociative symptoms began after injuring herself in a fall at work. She also knew she had been severely abused as a child, although she did not relate this to her dissociative symptoms.

9.6 Implications of the Studies’ Findings

9.6.1 Study 1: Measurement and Clinical Implications

The present findings encourage re-examination of the latent structure of dissociation as measured by the DES for both research purposes and for clinical use. If there is no taxon, there is the risk of losing clinically relevant information by forcing such a dichotomy on the data (Haslam et al., 2005; Leavitt, 1999), and there are also other theoretical implications if phenotypic dissociation is continuous. It perhaps arises from multiple causal influences rather than a limited causal nexus that determines category membership (Grove, 2008; Meehl, 1992) and, therefore, it is appropriate and necessary to test causal factors other than just childhood abuse. In addition, for research a dimensional construct needs to be measured as a dimension in order to obtain maximal measurement precision and statistical power. Dichotomising a dimensional construct reduces the statistical power by reducing the amount of variance explained by up to 60% (Cohen, 1983).

J. Ruscio and Ruscio (2002b) add to this argument by stating that psychological assessment should be based on a construct’s latent structure. They argue that
“dimensional measurement of a dimensional construct results in maximal measurement precision and statistical power, whereas spurious classification may have devastating consequences” (p.6). This congruence between a construct’s latent structure and the method of measurement is critical to the manner in which individuals are placed along a continuum or assigned to a group. If a construct is taxonic, individuals are best separated into nonarbitrary classes at the latent level. If a measurement model is based on dimensional scaling, the individuals only differ quantitatively and are best located along the continuum (J. Ruscio & Ruscio). Therefore, the differing measurement goals necessitate different assessment guidelines and approaches. This is the case for dissociation. It is important to know the latent structure for both research and clinical practice. Spurious classification may also alter statistical relations and inferred theoretical links between constructs. If the latent structure of dissociation is dimensional, then it follows that a model that classifies individuals into groups is clinically unproductive (J. Ruscio & Ruscio). In fact, it means that important data for those participants is lost if the full scale is discarded in the diagnosis or analysis of these individuals.

This premise was tested in a large Australian clinical sample who presented with symptoms of psychosis (Rosenman, Korten, Medway, & Evans, 2003). It was found that using a continuum measurement of psychopathology for psychosis was more helpful than using a categorical diagnostic method. Rosenman et al. argued that too much relevant data was lost with the categorical system, and that dimensions of psychopathological domains retain much important information that categorical methods discard. They suggest going back to dimensional measures instead of using the more popular categorical diagnostic criteria (e.g., the DSM-IV criteria) and argue that it is no more difficult to teach diagnosticians the dimensional approach than teach the categorical method. If this is the case for those with psychosis, a similar problem perhaps exists if those with a dissociative disorder are classified solely on the basis of the DSM-IV criteria or according a putative dissociative taxon.

There are questions yet to be answered. Are individuals assumed to have DID on the basis of the 8-item DES-T? Does this classification method also include the other dissociative disorders, or conversion disorder and somatoform dissociation? Did N.G. Waller et al. (1996) assume that DID was the marker of pathological dissociation by using a 50% sample composed of DID diagnoses? How does assigning all these nuances of dissociation to the one taxon help in their treatment? Treatment varies according to
the present symptoms. For example, Holmes et al. (2005) and R.J. Brown (2006) argue that their proposed two types of dissociation require different treatment approaches. For compartmentalisation, it is necessary to reactivate and reintegrate the compartmentalised elements, but for detachment, it is necessary to aim at preventing the triggering of this state, or at terminating it once triggered. If there are types or classes of dissociation, perhaps they differ according to the criteria outlined by Holmes et al. and R. J. Brown, or according to Nijenhuis’ (2004) somatic criteria. Further research is warranted to examine these areas.

The present results highlight both the necessity for caution in sub-typing individuals exhibiting high dissociation scores according to the 8-item DES-T, and the need for further research with other samples. It seems necessary, then, to continue to determine the parameters of dissociation, what constitutes pathological dissociation, and whether it is continuous or categorical, in order to clarify targets for research and to facilitate the treatment process for individuals who are often very traumatised and psychologically ill. This current project adds incrementally to prior research and highlights some of the problems associated with the conceptualisation, the aetiology, and the processes of dissociation.

9.6.2 Study 2: Clinical Implications

There are a number of clinical implications from the Study 2 results. The finding that childhood abuse is a direct predictor of dissociativeness indicates that clinical assessment of a trauma history and subsequent appropriate trauma therapy is necessary in those individuals who are highly dissociative and, vice versa, for those who present with a trauma history, an assessment of dissociativity is warranted. This is also encouraged by previous research (Anderson et al., 1993).

The findings in relation to resilience also have implications for clinical practice. Repeated and severe childhood abuse in conjunction with a vulnerable temperament may reduce an individual’s resilience levels. Therefore, working therapeutically to increase resilience in order to reduce dissociativity is a necessary aspect of treatment for these individuals. Clinicians need training in what constitutes resilience and how to teach clients these skills in conjunction with training in what constitutes psychopathology.

The post hoc analyses in relation to A, resilience and fantasy proneness (see Appendix D.3), while they need to be interpreted with great caution, gave some
indication of what might benefit therapeutically. The finding that the lack of trust in others, an A domain, is related to greater dissociativity and less resilience indicates that therapists need to work cautiously with these clients making sure they use supportive grounding techniques and develop trust before embarking on any trauma therapy. These results align with the views of a number of clinicians who maintain the establishment of trust and safety are paramount (e.g., Braun, 1986b; Chu, 1998b; Ross, 1997). Chu states that the trust factor and the interpersonal relatedness are basic to the therapeutic process and that some traumatised individuals never move beyond the first stage of stabilisation and symptom management to address the past trauma because of its severity.

The novel findings in relation to the positive pathway between resilience and fantasy proneness might also have clinical implications and warrant further investigation with more rigorous methodology. The use of individuals’ imaginative processes in therapy might be used to advantage in reducing dissociativeness. The post hoc findings perhaps imply that trauma and memory processing in its various forms is important in the treatment process. Results showed that there was a positive relationship between resilience and a vivid and lively recall of childhood memories, and conversely, a negative relationship if fantasies are often confused with real memories. This finding may speak to the conclusion from modelling that fantasy proneness can act in a protective manner through resilience. In the safety of the therapeutic alliance, fantasies that are confused for real memories can be challenged and vivid and lively recall of childhood memories can be encouraged. Chu (1998b) states that:

> Full realisation of the extent of their abuse…allows patients to begin to mourn the losses that have resulted from the abuse…Patients begin to accept they were truly not to blame for their victimization…Supported by these insights, patients begin the process of surrendering the role of victim and replacing it with a sense of self as a survivor of abuse. Over time, the abreactive process enables abuse survivors to mobilize their strengths and to gain control over their lives. (p.89)

Furthermore, the item level, correlational findings in the current study that individuals are more resilient and less fantasy prone if they are able to follow through with plans they make, and if they do not dwell on things they cannot do anything about, could also have clinical implications, and further research with more rigorous methodologies is warranted before definite conclusions can be drawn. Teaching clients/patients these life skills is often basic to the therapy process, important for
traumatised individuals, and can be taught using simple cognitive behavioural

**9.6.3 Study 3: Clinical Implications**

The results of Study 3 add incrementally to the above implications. First, the finding that there are two basic types of dissociative experience (absence of normal connection with reality, and presence of another personality or state) may need to be acknowledged in clinical practice. One consideration is that treatment varies according to the type of presenting disorder. As mentioned above, Holmes et al. (2005) and R. J. Brown (2006) argue that the two types of dissociation they propose require different treatment approaches. J. G. Allen et al. (1999) also suggest that the distinction between detached memories that are not retrievable and compartmentalised memories that are potentially retrievable is important in clinical situations. Therapists working with dissociative clients can assist in distinguishing between detached and compartmentalised memories and use appropriate treatment strategies. For example, the non-retrievable memories might be recoverable from third person reports or hard copy records from the past.

In contrast, retrievable memories often need techniques for working with alters. There are a number of published guidelines available to assist with this process (e.g., Chu, 1998; Fraser, 2003; International Society for the Study of Dissociation (ISSD), 2004, 2005; Ross, 1997). Study 3 participants related a number of helpful techniques that assisted in their therapy process. Many of these are outlined in the above guidelines. However, it seems that being correctly diagnosed as dissociative within a safe, affirming therapeutic environment is as important as the appropriate therapeutic technique.

The implications associated with the phenomenology of dissociative episodes are also important. Therapeutic techniques can be aimed more specifically at the different interruption points throughout the episodes in order to assist clients in gaining control over their dissociative symptoms. There is a need for the development and teaching of interventions prior to dissociative episodes in order to reduce triggers. Participants also indicated a need for coping strategies post episode.

Perhaps the above distinction in therapy practices for the two types of dissociation (Holmes et al., 2005) also applies to the finding that there might be two manifestations of depersonalisation. Simeon (2004) states there as yet no effective treatments for depersonalisation, and it is conjecture as to how much this relates to the
two types in light of the views of Holmes et al. (2005). Each manifestation may need its own particular treatment method. Further exploration of the possibility is warranted.

Some of the Study 3 participants spoke about how easy it was for them to deliberately dissociate (e.g., Louise and Vi). The participants’ self-induced, and often voluntary, dissociative states are similar to an ability often taught deliberately in therapeutic circumstances as self-hypnosis (Butler et al., 1996). Self-hypnosis is a technique that is advocated as a therapeutic technique to reduce anxieties, overcome unwanted behaviours, to regulate emotions, and to address negative thought patterns in the context of relaxation and hypnotic suggestions (see H. Spiegel & Spiegel, 1978; Yapko, 2003). Therefore, these deliberate dissociative states are akin to self-induced hypnotic states, and someone who is dissociative might be taught to realise they already use a form of self-hypnosis, and it is then merely a matter of controlling their dissociative state and turning it to advantage instead of seeing it as a problem. Through trained self-hypnosis, the individual is able to more easily problem solve, identify their innermost beliefs, gain greater personal control and implement a degree of personal therapy.

Eight participants noted that they had experienced unhelpful, even damaging, therapy and numerous misdiagnoses. Leonard et al. (2005) reported that only 21% of 250 clinicians reported experience with more than six cases of a dissociative disorder, 42% had had no experience. Just over half (55%) regarded dissociative disorders as valid diagnoses, 35% dubiously valid and 10% invalid. The majority of patients in Leonard et al.’s report experienced delays in diagnosis with adverse consequences, and had experienced sceptical or even antagonistic attitudes from clinicians (80%). The most helpful treatment, according to the patients, was individual psychotherapy but medications such as antidepressants were also helpful. These statistics are also consistent with attitudes of American psychiatrists (Pope, Oliva, Hudson, Bodkin, & Gruber, 1999). It seems there is a need for better training of health professionals in, first, awareness of the dissociative disorders, and second, their diagnosis and treatment. Medical, psychiatric, psychology and counselling courses could be structured to include teaching material about diagnosis and treatment, both psychotherapeutic and psychopharmacologic, of these disorders.

The results of Study 3 also highlight the need for community education about dissociative disorders. Participants spoke highly of those who helped support them through therapy, and of those in their communities who gave them understanding. Plain
language education about the dissociative disorders, what it is, and what not to do, would be beneficial. This is becoming normal government practice for mental disorders such as depression, anxiety, bipolar disorder, and postnatal depression (e.g., Beyondblue, 2000), therefore a similar practice including the dissociative disorders would be beneficial.

9.7 Methodological Issues

There were a number of limitations of the current project, some relating to the overall project and others relating to particular studies. Issues of sampling, measurement, and interview process are discussed in this section.

9.7.1 Sampling issues

A limitation of Study 1 was sub-optimal sampling. The sample was not a stratified random sample (Lenzenweger, 2004), nor was there any way of detecting the proportion of persons with pathological dissociation apart from the Bayesian probabilities and the percentage of participants with a DES score greater than 30. Diagnostic information would have been a good cross reference for the final taxa results. Despite this limitation, combining multiple samples with an oversampling of individuals with the target disorder is one way of overcoming a low base rate (Cole, 2004). This was the procedure used in Study 1. Cole also states that a heterogeneous sample possibly contains an overlap of disorders related to the target disorder, which confounds results. To overcome this, indicators need to be very disorder-specific to the target taxon. The DES was used for this purpose.

Study 2 required a heterogeneous sample (to provide a range of DES and DES-T scores) rendering generalisation to the broader population problematic. Study 2 was also cross-sectional and hence conclusions about the causal nature of adult personality, childhood trauma, or adjustment on dissociative tendencies cannot be drawn. Caution must be taken in inferring causal relationships because there is the possibility that trauma is related to dissociation in a non-causal manner, or the observed relationships may reflect perceived trauma severity as much as objective trauma severity. In addition, the majority of participants in Study 2 were female, with only 47 males in the sample of the 280 participants. Also, just over half the sample were young college students, which probably contributed to the higher DES mean than found in other general population studies (e.g., Ross et al., 1990a). Finally the cut-off age of 22 years was supported by
some literature but it must be recognised that this does not necessarily constitute a valid grouping criterion for age differences in dissociation.

Sampling issues were also a limitation for Study 3. With a sample size of nine, findings are not generalisable to the wider population. However, there are consistencies in the reporting of the phenomenology of dissociation that can be tested empirically in future research. In addition, while the boundaries of the phenomenon are still not exactly known, the respondents’ responses enabled exploration of tendencies within the phenomenon.

In addition, a number of issues were identified with both the questionnaire and the interview samples concerning the accuracy of dissociative recall. It is not certain that those who were highly dissociative had clarity of recall for all parts of the questionnaire for Study 2. It is noted that one participant in particular left out large portions of the questionnaire that were of a more traumatic nature. Her information was unable to be included for a number of the analyses for that reason.

Finally, in Study 3, the nature of the interviews could potentially cause some level of distress. This may have been a factor for the one male who cancelled his appointment, and for one female who failed to attend her appointment, the dissociative nature of the disorder may have resulted in her forgetting to attend.

### 9.7.2 Measurement issues

One consideration in studies using taxometric and structural equation modelling analyses is that the DES, DES-T, and CTQ generate a highly skewed distribution, especially in a normal population. For taxometric procedures, analysing highly skewed data with these procedures is not recommended, especially if the base rate of taxon membership is low. However, as mentioned earlier, a decision was made to not transform the data because results from transformed variables are not easily interpreted (Tabachnick & Fidell, 2001), and additionally, when conducting SEM analyses with larger samples of over 200 participants, problems with non-normality are minimised to some extent (Lani, 1996-2006).

Another limitation could potentially be the use of self-report measures, especially with highly dissociative or DID participants, due to the possibilities of them dissociating while responding. Aside from that possibility, research has found that dissociation is not influenced by the need to give socially acceptable answers either by under-reporting or over-reporting (Beere, Pica, & Maurer, 1996). Therefore, using a
self-report measure probably had negligible effects on results. In addition, the possibility of self-selection of participants may also have affected the results. Those who were already interested in trauma and dissociation may have been more drawn to participate, thus skewing the results in favour of those who are interested in the topic of dissociation and potentially limiting generalisability to the general population. However, this would potentially have increased the possibility of finding a taxon in Study 1 rather than diminished it, and would also have assisted with the explorations of Study 2.

A further limitation for Study 2 may be the scales used for resilience and N. The raw correlation in the current results between the two constructs was moderate ($r = -.63$, $p < .001$), and the beta weights in the SEM models were also moderate ($\beta > .7$), perhaps suggesting a there is some overlap between the two variables. Further research is needed to demonstrate whether they are separate constructs.

### 9.7.3 Interview issues

In conducting the interviews for Study 3, one limitation was that the researcher is a trained counsellor. The semi-structured interview technique requires a different approach from a counselling session, in that it needs to be a less empathic and supportive type of questioning, instead allowing the respondent to give their version of what the phenomenon of dissociation is like for them without interruption. There were instances where the interviewer interrupted the flow of response when more insightful information about the phenomenon might have come to light if the participant was left to continue without comment or further questioning from the researcher.

A further limitation was that only the persons themselves who experienced dissociation were interviewed. There were no interviews with participants’ therapists or any other third person reports that might add to, corroborate, or question the experiences of the participants. These reports might have filled in some of the gaps in memory experienced by the participants and assisted in greater understanding of the dissociative episode process.

### 9.8 Further Research Arising out of the Three Studies - What Questions Still Remain?

The above implications and limitations point to areas of further research. First, future research could examine a wider range of indicators that are indicative of a dissociative disorder, such as those from the Multidimensional Inventory of Dissociation
(Dell, 2006), to determine if a taxon exists. Dell (2002) suggests that there are multiple indicators of dissociativity and it would be a matter of determining which ones do not overlap with other disorders, for example depersonalisation, which is also seen in anxiety disorders and PTSD. Alternatively, a set of items that includes indicators of somatoform dissociation (Nijenhuis, 2000; Nijenhuis et al., 1999) could be used to test for taxonicity. Nijenhuis et al. found that somatoform dissociation discriminates well between pathological dissociation and normal dissociation. Adding indicators from this construct might produce a more stable taxon that measures the pathological construct.

Furthermore, the concepts of detachment and compartmentalisation (J. G. Allen et al., 1999; R. J. Brown, 2006; Holmes et al., 2005) suggesting there are two qualitatively different forms of dissociation need further examination in relation to the continuum/taxon debate. This view of dissociation suggests that both detachment and compartmentalisation, which are qualitatively different, can be conceptualised as continuous constructs ranging from normal to pathological. Perhaps future research could examine whether a dissociative taxon is more aligned with these conceptualisations of dissociation. To conceptualise dissociation according to these two constructs would also perhaps facilitate diagnosis, as Rosenman et al. (2003) suggest.

In the light of contemporary thinking on taxometric research, it seems a further step is to obtain a large stratified random sample with particular attention paid to including greater numbers of those diagnosed with dissociative disorders. Future research might also consider examining multiple measures of dissociation other than the DES in order to capture a greater number of dissociative indicators to examine whether there is indeed a dissociative taxon.

A potential improvement to the design of Study 2 would have been the inclusion of a measure of attachment. While attachment difficulties may be implicit in the CTQ (D. P. Bernstein & Fink, 1998) in that respondents are asked if they have experienced childhood neglect and/or maltreatment, no specific attachment problems can be inferred from their answers. However, attachment would be a difficult construct to examine retrospectively. There might be good hypotheses that could be developed about the role of childhood attachment in dissociation, but there would be validity problems if attempts were made to test these hypotheses in adults.

If disorganised attachment is purported to be a precursor to pathological dissociation symptoms in young adulthood as some longitudinal research suggests (e.g., Lyons-Ruth et al., 2006; Lyons-Ruth, Yellin, Melnick, & Atwood, 2003; Ogawa,
Sroufe, Weinfield, Carlson, & Egeland, 1997), then it is perhaps more difficult to examine this relationship in cross-sectional, retrospective adult studies, especially as there seem to be difficulties with relating the current measures of adult attachment to infant attachment.

There are two approaches to measuring attachment in adulthood: an interview format (e.g., the Adult Attachment Interview (AAI: George, Kaplan, & Main, 1985, cited in Crowell & Waters, 1996); and self-report measures (e.g., Bartholomew & Horowitz, 1991; Brennan, Clark, & Shaver, 1998). Neither are purported to accurately reflect infant attachment styles (Jacobvitz, Curran, & Moller, 2002), nor do they correlate sufficiently to use together to assess attachment style (Bernier, Larose, & Boivin, 2007). It seems then that there would be difficulty in measuring childhood attachment retrospectively in adults in a way that is meaningful for the study of dissociation.

However, a way might be found to examine the relationship between attachment and dissociation that is inclusive of predictors such as used in the current project. One study, for example, examined attachment-related trauma in relation to dissociative symptoms and suggest that cognitive disorganisation may be an important variable (M. West, Adam, Spreng, & Rose, 2001). Further research could re-examine this relationship in adults using multiple measures of attachment as was done in another study (Bernier et al., 2007), plus assessing multiple types of trauma, such as childhood trauma with the CTQ, and trauma to the mother around the time of birth (Pasquini, Liotti, Mazzotti, Fassone, & Picardi, 2002).

Other areas not covered in the current project that could be researched in conjunction with the variables used are: (a) to include somatoform dissociation (Nijenhuis et al., 1996) in the current Study 2 models. Research suggests that physical abuse is more associated with somatoform dissociation than it is to psychological dissociation (G. Waller et al., 2000), and another study found it was related to more severe PTSD symptoms than to dissociation (Carlson et al., 2001); (b) to examine populations who have experienced trauma but have not developed long term psychological problems such as PTSD or dissociative disorders as suggested by Chu (1998b). While this was partially addressed in the current project by including resilience as a construct, this was not the main focus; and (c) to examine further the links between dissociation, trauma, personality, and adjustment. They are not simple and require
further research, especially emphasising the role that resilience can play in reducing the effect of pathological dissociation on individuals.

9.9 Conclusion

The purpose of this current project was to explore various aspects of the construct of dissociation, with the overarching aim of adding to and addressing gaps in the existing literature and to improve our understanding of dissociation and its multifaceted nature. The results of the three separate but inter-related studies have added to the current body of knowledge in the dissociation field. The richness of dissociation has been demonstrated in multiple ways. The results have shown that within dissociation there is a multiplicity of conceptualisation, of cause, and of process.

Within the context of the above limitations it seems reasonable to conclude that the findings of the current project are consistent the continuum model of dissociation, while conceding that a dissociative taxon might be discovered using a measure other than the DES. These findings are at odds with the current views of some in the dissociative field that view pathological dissociation as categorically distinct (N. G. Waller et al., 1996; N. G. Waller & Ross, 1997). On the basis of the present analysis, it is concluded that the sample in Study 1 represents a collection of individuals that differ quantitatively and not categorically in their tendency towards dissociative experiences. While the present findings stand in contrast to three previous reports, it is further concluded that claims of an established dissociative taxon may be premature. Further research with other samples and other salient indicators of pathological dissociation is warranted.

It is still possible that dissociation is both dimensional and categorical, similar to depression (Beach & Amir, 2003). Finding the indicators of pathological dissociation might take more time, if they are there. While Meehl (1992) suggests that the identification of a taxon within psychopathology and personality research will be a rare occurrence, Widiger (2001) suggests it is more a matter of identifying the characteristics such as behaviours, beliefs, attitudes that best define the taxon. These have not yet been adequately identified for dissociation.

In addition, the findings of both Study 2 and Study 3 are consistent with the traumagenic model of dissociation and previous research that suggests childhood trauma influences the development of dissociative disorders (Chu, 1998b; Kluft, 1996; Putnam, 1985; Ross, 1997). However, the story about dissociation does not reduce to a simple
trauma cause. As this project has demonstrated there are other important mediating factors involved in the development of a dissociative disorder. Respondents in both studies reported that fantasy proneness can influence the development of dissociative disorders, and Study 2 results showed that it mediates the association between trauma and dissociation. Vulnerable personality also plays a part, especially neuroticism, which has a strong association with decreased resilience in some individuals. Results also suggest that increasing individuals’ resilience levels has the potential to decrease their dissociativeness and some aspects of fantasy-proneness. Therefore, the current project adds incrementally to our understanding of dissociation. Previous studies espousing the trauma, adjustment, and personality models have seemingly been at odds. However, in the present data these models are added to and reconciled.

The sociocognitive model that argues for an iatrogenic basis for the dissociative disorders was not endorsed by the participants in Studies 2 or 3. Study 3 participants explained that their dissociativeness was present prior to their therapy experiences and it was their inability to cope with their dissociative experiences that typically drove them to therapy. Instead, the majority of them indicated that childhood trauma was instrumental in their dissociativeness. These nine participants demonstrated that the process of dissociation differs markedly between people and there is no simple pathway through which we can catch the lived experience of dissociation. They also highlighted an interesting facet of dissociation; the double bind associated with it. The participants both hated it and loved it. While it worked for them in allowing them to de-stress, it also worked against them in their daily activities.

There are many highlights throughout the current project all demonstrating the multifaceted nature of dissociation. The richness of dissociation has been demonstrated in the multiplicity of conceptualization, of cause, and of process. There is a need for future research to continue to examine dissociation using multiple methods in order to continue the increase in understanding of this intriguing construct. In particular there is a need for further understanding of its process, a difficult target of investigation because of the very nature of dissociation and its associated amnesia.
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APPENDIX A.1: The Dissociative Experiences Scale (Carlson & Putnam, 1993)

This questionnaire consists of twenty-eight questions about experiences that you may have in your daily life. We are interested in how often you have these experiences. It is important, however, that your answers show how often these experiences happen to you when you are not under the influence of alcohol or drugs.

To answer these questions, please determine to what degree the experience described in the question applies to you, and circle the number to show what percentage of the time you have the experience.

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1. Some people have the experience of driving or riding in a car or bus or subway and suddenly realising that they don't remember what has happened during all or part of the trip. Circle a number to show what percentage of the time this happens to you.

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2. Some people find that sometimes they are listening to someone talk and they suddenly realise that they did not hear part or all of what was just said.

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3. Some people have the experience of finding themselves in a place and having no idea how they got there.

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4. Some people have the experience of finding themselves dressed in clothes that they don't remember putting on.

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5. Some people have the experience of finding new things in their belongings that they do not remember buying.

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6. Some people sometimes find that they are approached by people that they do not know, who call them by another name or insist that they have met them before.

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7. Some people sometimes have the experience of feeling as though they are standing next to themselves or watching themselves do something and they actually see themselves as if they were looking at another person.

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8. Some people are told that they sometimes do not recognise friends or family members.

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9. Some people find that they have no memory for some important events in their lives (for example, a wedding or graduation).

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10. Some people have the experience of being accused of lying when they do not think that they have lied.
   0% 10 20 30 40 50 60 70 80 90 100%

11. Some people have the experience of looking in a mirror and not recognising themselves.
   0% 10 20 30 40 50 60 70 80 90 100%

12. Some people sometimes have the experience of feeling that other people, objects, and the world around them are not real.
   0% 10 20 30 40 50 60 70 80 90 100%

13. Some people sometimes have the experience of feeling that their body does not seem to belong to them.
   0% 10 20 30 40 50 60 70 80 90 100%

14. Some people have the experience of sometimes remembering a past event so vividly that they feel as if they were reliving the event.
   0% 10 20 30 40 50 60 70 80 90 100%

15. Some people have the experience of not being sure whether things that they remember happening really did happen or whether they just dreamed them.
   0% 10 20 30 40 50 60 70 80 90 100%

16. Some people have the experience of being in a familiar place but finding it strange and unfamiliar.
   0% 10 20 30 40 50 60 70 80 90 100%

17. Some people find that when they are watching television or a movie they become so absorbed in the story that they are unaware of other events happening around them.
   0% 10 20 30 40 50 60 70 80 90 100%

18. Some people find that they become so involved in a fantasy or daydream that it feels as though it were really happening to them.
   0% 10 20 30 40 50 60 70 80 90 100%

19. Some people find that they sometimes are able to ignore pain.
   0% 10 20 30 40 50 60 70 80 90 100%

20. Some people find that they sometimes sit staring off into space, thinking of nothing, and are not aware of the passage of time.
   0% 10 20 30 40 50 60 70 80 90 100%

21. Some people sometimes find that when they are alone they talk out loud to themselves.
   0% 10 20 30 40 50 60 70 80 90 100%

22. Some people find that in one situation they may act so differently compared with another situation that they feel almost as if they were two different people.
   0% 10 20 30 40 50 60 70 80 90 100%
23. Some people sometimes find that in certain situations they are able to do things with amazing ease and spontaneity that would usually be difficult for them (for example, sports, work, social situations, etc.).

24. Some people sometimes find that they cannot remember whether they have done something or have just thought about doing that thing (for example, not knowing whether they have just mailed a letter or have just thought about mailing it).

25. Some people find evidence that they have done things that they do not remember doing.

26. Some people sometimes find writings, drawings, or notes among their belongings that they must have done but cannot remember doing.

27. Some people sometimes find they hear voices inside their head that tell them to do things or comment on things that they are doing.

28. Some people sometimes feel as if they are looking at the world through a fog, so that people and objects appear far away or unclear.
APPENDIX A.2: The Childhood Trauma Questionnaire (D.P. Bernstein & Fink, 1998)

These questions ask about some of your experiences growing up as a child and a teenager. Although these questions are of a personal nature, please try to answer as honestly as you can.

For each question, circle the number that corresponds to the response that best describes how you feel. If you wish to change your response, put an X through it and circle your new choice.

1 = never true,  
2 = rarely true,  
3 = sometimes true,  
4 = often true,  
5 = very often true.

<table>
<thead>
<tr>
<th>When I was growing up:</th>
<th></th>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I didn't have enough to eat.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. I knew that there was someone to take care of me and protect me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. People in my family called me things like &quot;stupid,&quot; &quot;lazy,&quot; or &quot;ugly.&quot;</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. My parents were too drunk or high to take care of the family.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. There was someone in my family who helped me feel that I was important or special.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. I had to wear dirty clothes.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. I felt loved.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. I thought my parents wished I had never been born.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. I got hit so hard by someone in my family that I had to see a doctor or go to the hospital.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10. There was something I wanted to change about my family.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>5</td>
</tr>
<tr>
<td>11. People in my family hit me so hard it left me with bruises or marks.</td>
<td>1</td>
<td>2</td>
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<tr>
<td>12. I was punished with a belt, a board, a cord, or some other hard object.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>5</td>
</tr>
<tr>
<td>13. People in my family looked out for each other.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14. People in my family said hurtful or insulting things to me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>15. I believe that I was physically abused.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>16. I had the perfect childhood.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>17. I got hit or beaten so badly that it was noticed by someone like a teacher, neighbour or doctor.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>18. I felt that someone in my family hated me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<tr>
<td>Statement</td>
<td>1</td>
<td>2</td>
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<td>--------------------------------------------------------------------------</td>
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<tr>
<td>19. People in my family felt close to each other.</td>
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<tr>
<td>20. Someone tried to touch me in a sexual way, or tried to make me touch</td>
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<tr>
<td>them.</td>
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<tr>
<td>21. Someone threatened to hurt me or tell lies about me unless I did</td>
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<td>something sexual with them.</td>
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<tr>
<td>22. I had the best family in the world.</td>
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<tr>
<td>23. Someone tried to make me do sexual things or watch sexual things.</td>
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<tr>
<td>24. Someone molested me.</td>
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<tr>
<td>25. I believe that I was emotionally abused.</td>
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</tr>
<tr>
<td>26. There was someone to take me to the doctor if I needed it.</td>
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</tr>
<tr>
<td>27. I believe that I was sexually abused.</td>
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<tr>
<td>28. My family was a source of strength and support.</td>
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</tbody>
</table>
APPENDIX A.3: The NEO-FFI (Costa & McCrae, 1992)

Please read each of the statements below and indicate using the scale shown how much you think the statement is true or false, or how much you agree or disagree with the statement.

1 Strongly disagree or definitely false
2 Disagree or mostly false
3 Neutral or equally true or false
4 Agree or mostly true
5 Strongly agree or definitely true

1. I am not a worrier. 1 2 3 4 5
2. I like to have a lot of people around me. 1 2 3 4 5
3. I don’t like to waste my time daydreaming. 1 2 3 4 5
4. I try to be courteous to everyone I meet. 1 2 3 4 5
5. I keep my belongings clean and neat. 1 2 3 4 5
6. I often feel inferior to others. 1 2 3 4 5
7. I laugh easily. 1 2 3 4 5
8. Once I find the right way to do something, I stick to it. 1 2 3 4 5
9. I often get into arguments with my family and co-workers. 1 2 3 4 5
10. I’m pretty good about pacing myself so as to get things done on time. 1 2 3 4 5
11. When I’m under a great deal of stress, sometimes I feel like I’m going to pieces. 1 2 3 4 5
12. I don’t consider myself especially "light-hearted". 1 2 3 4 5
13. I am intrigued by the patterns I find in art and nature. 1 2 3 4 5
14. Some people think I'm selfish and egotistical. 1 2 3 4 5
15. I am not a very methodical person. 1 2 3 4 5
16. I rarely feel lonely or blue. 1 2 3 4 5
17. I really enjoy talking to people. 1 2 3 4 5
18. I believe letting students hear controversial speakers can only confuse and mislead them. 1 2 3 4 5
<table>
<thead>
<tr>
<th></th>
<th>Strongly disagree or definitely false</th>
<th>Disagree or mostly false</th>
<th>Neutral or equally true or false</th>
<th>Agree or mostly true</th>
<th>Strongly agree or definitely true</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>I would rather co-operate with others than compete with them.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
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<tr>
<td>20</td>
<td>I try to perform all the tasks assigned to me conscientiously.</td>
<td>1 2 3 4 5</td>
<td></td>
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<tr>
<td>21</td>
<td>I often feel tense and jittery.</td>
<td>1 2 3 4 5</td>
<td></td>
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<tr>
<td>22</td>
<td>I like to be where the action is.</td>
<td>1 2 3 4 5</td>
<td></td>
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<tr>
<td>23</td>
<td>Poetry has little or no effect on me.</td>
<td>1 2 3 4 5</td>
<td></td>
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<tr>
<td>24</td>
<td>I tend to be cynical and sceptical of others’ intentions.</td>
<td>1 2 3 4 5</td>
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<tr>
<td>25</td>
<td>I have a clear set of goals and work toward them in an orderly fashion.</td>
<td>1 2 3 4 5</td>
<td></td>
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<tr>
<td>26</td>
<td>Sometimes I feel completely worthless.</td>
<td>1 2 3 4 5</td>
<td></td>
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<tr>
<td>27</td>
<td>I usually prefer to do things alone.</td>
<td>1 2 3 4 5</td>
<td></td>
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<tr>
<td>28</td>
<td>I often try new and foreign foods.</td>
<td>1 2 3 4 5</td>
<td></td>
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<tr>
<td>29</td>
<td>I believe that most people will take advantage of you if you let them.</td>
<td>1 2 3 4 5</td>
<td></td>
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<tr>
<td>30</td>
<td>I waste a lot of time before settling down to work.</td>
<td>1 2 3 4 5</td>
<td></td>
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<tr>
<td>31</td>
<td>I rarely feel fearful or anxious.</td>
<td>1 2 3 4 5</td>
<td></td>
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<tr>
<td>32</td>
<td>I often feel as if I'm bursting with energy.</td>
<td>1 2 3 4 5</td>
<td></td>
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<tr>
<td>33</td>
<td>I seldom notice the moods or feelings that different environments produce.</td>
<td>1 2 3 4 5</td>
<td></td>
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<tr>
<td>34</td>
<td>Most people I know like me.</td>
<td>1 2 3 4 5</td>
<td></td>
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<tr>
<td>35</td>
<td>I work hard to accomplish my goals.</td>
<td>1 2 3 4 5</td>
<td></td>
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<tr>
<td>36</td>
<td>I often get angry at the way people treat me.</td>
<td>1 2 3 4 5</td>
<td></td>
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<tr>
<td>37</td>
<td>I am a cheerful, high-spirited person.</td>
<td>1 2 3 4 5</td>
<td></td>
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<tr>
<td>38</td>
<td>I believe we should look to our religious authorities for decisions on moral issues.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
1. **Strongly disagree or definitely false**
2. **Disagree or mostly false**
3. **Neutral or equally true or false**
4. **Agree or mostly true**
5. **Strongly agree or definitely true**

<p>| | | | | |</p>
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</thead>
<tbody>
<tr>
<td>39. Some people think of me as cold and calculating.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>40. When I make a commitment, I can always be counted on to follow through.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>41. Too often, when things go wrong, I get discouraged and feel like giving up.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>42. I am not a cheerful optimist.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>43. Sometimes when I am reading poetry or looking at a work of art, I feel a chill or wave of excitement.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>44. I’m hard-headed and tough-minded in my attitudes.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>45. Sometimes I’m not as dependable or reliable, as I should be.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>46. I am seldom sad or depressed.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>47. My life is fast-paced.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>48. I have little interest in speculating on the nature of the universe or the human condition.</td>
<td>1</td>
<td>2</td>
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</tr>
<tr>
<td>49. I generally try to be thoughtful and considerate.</td>
<td>1</td>
<td>2</td>
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<tr>
<td>50. I am a productive person who always gets the job done.</td>
<td>1</td>
<td>2</td>
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<tr>
<td>51. I often feel helpless and want someone else to solve my problems.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>52. I am a very active person.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>53. I have a lot of intellectual curiosity.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>54. If I don’t like people, I let them know it.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>55. I never seem to be able to get organised.</td>
<td>1</td>
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<tr>
<td></td>
<td>Description</td>
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<tr>
<td>1</td>
<td>Strongly disagree or definitely false</td>
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<td>2</td>
<td>Disagree or mostly false</td>
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<td>3</td>
<td>Neutral or equally true or false</td>
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<td>4</td>
<td>Agree or mostly true</td>
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<tr>
<td>5</td>
<td>Strongly agree or definitely true</td>
<td></td>
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</tbody>
</table>

56. At times I have been so ashamed I just wanted to hide. 1 2 3 4 5

57. I would rather go my own way than be a leader of others. 1 2 3 4 5

58. I often enjoy playing with theories or abstract ideas. 1 2 3 4 5

59. If necessary, I am willing to manipulate people to get what I want. 1 2 3 4 5

60. I strive for excellence in everything I do. 1 2 3 4 5
APPENDIX A.4: The Creative Experiences Questionnaire (Merckelbach, Horsenelberg, & Muris, 2001)

Circle "Yes" if you agree with the statements below, "no" if you don't agree.

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td>As a child, I thought the dolls, teddy bears, and stuffed animals that I played with were living creatures</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>As a child, I strongly believed in the existence of dwarfs, elves, and other fairy tale figures</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>As a child I had my own make believe friend or animal</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>As a child, I could very easily identify with the main character of a story and/or movie</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>As a child, I sometimes had the feeling that I was someone else (e.g., a princess, an orphan, etc.)</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>As a child, I was encouraged by adults (parents, grandparents, brothers, sisters) to fully indulge myself in my fantasies and daydreams</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>As a child, I often felt lonely</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>As a child, I devoted my time to playing a musical instrument, dancing, acting, and/or drawing</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>I spend more than half the day (daytime) fantasising or daydreaming</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>Many of my friends and/or relatives do not know that I have such detailed fantasies</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>Many of my fantasies have a realistic intensity</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>Many of my fantasies are often just as lively as a good movie</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>I often confuse fantasies with real memories</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>I am never bored because I start fantasising when things get boring</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>Sometimes I act as if I am somebody else and I completely identify myself with that role</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td>When I recall my childhood, I have very vivid and lively memories</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td>I can recall many occurrences before the age of three</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td>When I perceive violence on television, I get so into it that I get really upset</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td>When I think of something cold, I actually get cold</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td>When I imagine I have eaten rotten food, I really get nauseous</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>21.</td>
<td>I often have the feeling that I can predict things that are bound to happen in the future</td>
<td>Yes</td>
<td>No</td>
<td></td>
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<td></td>
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<tr>
<td>22.</td>
<td>I often have the experience of thinking of someone and soon afterwards that particular person calls or shows up</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>23.</td>
<td>I sometimes feel that I have had an out of body experience</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>24.</td>
<td>When I sing or write something, I sometimes have the feeling that someone or something outside myself directs me</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>25.</td>
<td>During my life, I have had intense religious experiences which influenced me in a very strong manner</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX A.5: The Resilience Scale (Wagnild & Young, 1993)

Please read each of the statements below and indicate the degree to which you agree or disagree with each statement by circling a number in each sequence.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Disagree</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. When I make plans I follow through with them</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>2. I usually manage one way or another</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>3. I am able to depend on myself more than anyone else</td>
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<td>6. I feel proud that I have accomplished things in my life</td>
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<td>8. I am friends with myself</td>
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<td>9. I feel that I can handle many things at a time</td>
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<td>10. I am determined</td>
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<td>11. I seldom wonder what the point of it all is</td>
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<tr>
<td>21. My life has meaning</td>
<td>1 2 3 4 5 6 7</td>
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<tr>
<td>Disagree</td>
<td>Agree</td>
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<td>1 2 3 4 5 6 7</td>
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</tbody>
</table>

22. I do not dwell on things that I can't do anything about

23. When I'm in a difficult situation, I can usually find my way out of it

24. I have enough energy to do what I have to do

25. It's okay if there are people who don't like me
APPENDIX A.6: Study 2 Questionnaire

Swinburne University of Technology
An Exploration of Dissociation: Study 1
Investigators: Dr. Greg Murray and Ms. Helene Richardson

My name is Helene Richardson, and I am a Doctoral student studying Psychology at Swinburne University under the supervision of Dr. Greg Murray. I am undertaking a research project that aims to explore a coping strategy many people use, that of dissociation. Many clinicians believe that dissociation can be anything from daydreaming or getting "lost" in a movie or book, to profound alterations in memory and identity that can result in serious impairment or inability to function.

I would like to invite you to participate in this project. It is a series of studies designed to deepen our understanding of dissociation. There are two studies in this project that you can assist with. Participation in both studies is voluntary. If you wish to participate, you will be asked to fill in a questionnaire for Study 1 that involves answering questions about your personality, your coping style, your trauma experience, and your dissociative experiences by circling the appropriate answer to each question. You will also be asked for more general information, such as age, gender, marital status, ethnicity, education, and experience of therapy. It should take you about 45 - 50 minutes to complete. The results of this study may be presented as conference papers or published in a scientific journal. However, only group data will be presented and no individual will be identifiable. Your participation is completely voluntary, and an initial decision to participate does not stop you from withdrawing from the study at any time. Return of this questionnaire will be taken as consent for your data to be used in Study 1.

In Study 2, I am interested in understanding what dissociation is like for you as an individual. Therefore, participation in the second study will be limited to those who obtain high scores in the questionnaire on the measure of dissociation. Participation in Study 1 does not commit you to participation in Study 2.

If you choose to participate, any information obtained will be completely confidential and de-identified. Any identifying information you give will not be attached to your data. It will be securely stored separately from the data so you will not be able to be identified by anyone but the student researcher. At the end of the study, all identifying data will be destroyed.

It is possible that some of the questions may be distressing to you if you have experienced considerable past trauma, and you may experience unpleasant or distressing emotions or thoughts related to the earlier trauma. If this is the case, you are free to contact either the student researcher or the principle supervisor. You may also wish to be referred to a counsellor if you are not already involved in therapy. You are also free to withdraw from the study at any time.

Alternatively, you could ring the Swinburne Psychology Centre on 9214 8653, or Lifeline on 131114.

This research conforms to the principles set out in the Swinburne University of Technology Policy on Research Ethics and the NHMRC guidelines as specified in the National Statement on Ethical Conduct on Research Involving Humans.
Any questions or concerns regarding the project entitled "An Exploration of Dissociation," can be directed to the Senior Investigator, Dr Greg Murray on 9214 8300, or the Principle Investigator, Helene Richardson on 9876 1729.

If you have any queries or concerns that Dr Greg Murray was unable to satisfy, contact:

The Chair, SBS Research Ethics Committee
School of Behavioural Sciences, Mail H24, PO Box 218,
Swinburne University of Technology, Hawthorn, Victoria 3122

If you have a complaint about the way that you were treated during this study, please write to:

The Chair, Human Research Ethics Committee, PO Box 218
Swinburne University of Technology, Hawthorn, Victoria 3122

Please consider the purposes and time commitment of this study before you decide whether or not to participate. Retain this information sheet for your own records.
SECTION A: Your personality

Please read each of the statements below and indicate using the scale shown how much you think the statement is true or false, or how much you agree or disagree with the statement.

1 Strongly disagree or definitely false
2 Disagree or mostly false
3 Neutral or equally true or false
4 Agree or mostly true
5 Strongly agree or definitely true

1. I am not a worrier. 1 2 3 4 5
2. I like to have a lot of people around me. 1 2 3 4 5
3. I don’t like to waste my time daydreaming. 1 2 3 4 5
4. I try to be courteous to everyone I meet. 1 2 3 4 5
5. I keep my belongings clean and neat. 1 2 3 4 5
6. I often feel inferior to others. 1 2 3 4 5
7. I laugh easily. 1 2 3 4 5
8. Once I find the right way to do something, I stick to it. 1 2 3 4 5
9. I often get into arguments with my family and co-workers. 1 2 3 4 5
10. I’m pretty good about pacing myself so as to get things done on time. 1 2 3 4 5
11. When I’m under a great deal of stress, sometimes I feel like I’m going to pieces. 1 2 3 4 5
12. I don’t consider myself especially "light-hearted". 1 2 3 4 5
13. I am intrigued by the patterns I find in art and nature. 1 2 3 4 5
14. Some people think I'm selfish and egotistical. 1 2 3 4 5
15. I am not a very methodical person. 1 2 3 4 5
16. I rarely feel lonely or blue. 1 2 3 4 5
17. I really enjoy talking to people. 1 2 3 4 5
18. I believe letting students hear controversial speakers can only confuse and mislead them. 1 2 3 4 5
<table>
<thead>
<tr>
<th></th>
<th>Statement</th>
<th>1</th>
<th>2</th>
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<tbody>
<tr>
<td>19</td>
<td>I would rather co-operate with others than compete with them.</td>
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<td>20</td>
<td>I try to perform all the tasks assigned to me conscientiously.</td>
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<td>21</td>
<td>I often feel tense and jittery.</td>
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<td>22</td>
<td>I like to be where the action is.</td>
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<td>23</td>
<td>Poetry has little or no effect on me.</td>
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<td>24</td>
<td>I tend to be cynical and sceptical of others’ intentions.</td>
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<td>25</td>
<td>I have a clear set of goals and work toward them in an orderly fashion.</td>
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<td>26</td>
<td>Sometimes I feel completely worthless.</td>
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<td>27</td>
<td>I usually prefer to do things alone.</td>
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<td>28</td>
<td>I often try new and foreign foods.</td>
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<tr>
<td>29</td>
<td>I believe that most people will take advantage of you if you let them.</td>
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<tr>
<td>30</td>
<td>I waste a lot of time before settling down to work.</td>
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<tr>
<td>31</td>
<td>I rarely feel fearful or anxious.</td>
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<tr>
<td>32</td>
<td>I often feel as if I'm bursting with energy.</td>
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<td>33</td>
<td>I seldom notice the moods or feelings that different environments produce.</td>
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<tr>
<td>34</td>
<td>Most people I know like me.</td>
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<tr>
<td>35</td>
<td>I work hard to accomplish my goals.</td>
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<tr>
<td>36</td>
<td>I often get angry at the way people treat me.</td>
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<tr>
<td>37</td>
<td>I am a cheerful, high-spirited person.</td>
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<tr>
<td>38</td>
<td>I believe we should look to our religious authorities for decisions on moral issues.</td>
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<tr>
<td>1</td>
<td>Strongly disagree or definitely false</td>
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<td>2</td>
<td>Disagree or mostly false</td>
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<td>3</td>
<td>Neutral or equally true or false</td>
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<td>4</td>
<td>Agree or mostly true</td>
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<tr>
<td>5</td>
<td>Strongly agree or definitely true</td>
<td></td>
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</tr>
<tr>
<td>39</td>
<td>Some people think of me as cold and calculating.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>40</td>
<td>When I make a commitment, I can always be counted on to follow through.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>41</td>
<td>Too often, when things go wrong, I get discouraged and feel like giving up.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>42</td>
<td>I am not a cheerful optimist.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>43</td>
<td>Sometimes when I am reading poetry or looking at a work of art, I feel a chill or wave of excitement.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>44</td>
<td>I’m hard-headed and tough-minded in my attitudes.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>45</td>
<td>Sometimes I’m not as dependable or reliable, as I should be.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>46</td>
<td>I am seldom sad or depressed.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>47</td>
<td>My life is fast-paced.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>48</td>
<td>I have little interest in speculating on the nature of the universe or the human condition.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>49</td>
<td>I generally try to be thoughtful and considerate.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>50</td>
<td>I am a productive person who always gets the job done.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>51</td>
<td>I often feel helpless and want someone else to solve my problems.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>52</td>
<td>I am a very active person.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>53</td>
<td>I have a lot of intellectual curiosity.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>54</td>
<td>If I don’t like people, I let them know it.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>55</td>
<td>I never seem to be able to get organised.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
56. At times I have been so ashamed I just wanted to hide. 1 2 3 4 5
57. I would rather go my own way than be a leader of others. 1 2 3 4 5
58. I often enjoy playing with theories or abstract ideas. 1 2 3 4 5
59. If necessary, I am willing to manipulate people to get what I want. 1 2 3 4 5
60. I strive for excellence in everything I do. 1 2 3 4 5

SECTION B:
Please read each of the statements below and indicate the degree to which you agree or disagree with each statement by circling a number in each sequence.

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<thead>
<tr>
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</tr>
<tr>
<td>Statement</td>
<td>Disagree</td>
<td>1</td>
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<td>---------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>13. I can get through difficult times because I've experienced difficulty before</td>
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<td>2</td>
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<tr>
<td>14. I have self-discipline</td>
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<td>2</td>
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<td>15. I keep interested in things</td>
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<tr>
<td>22. I do not dwell on things that I can't do anything about</td>
<td>1</td>
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</tr>
<tr>
<td>23. When I'm in a difficult situation, I can usually find my way out of it</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>24. I have enough energy to do what I have to do</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>25. It's okay if there are people who don't like me</td>
<td>1</td>
<td>2</td>
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</tbody>
</table>
SECTION C:
This questionnaire consists of twenty-eight questions about experiences that you may have in your daily life. We are interested in how often you have these experiences. It is important, however, that your answers show how often these experiences happen to you when you are not under the influence of alcohol or drugs.

To answer these questions, please determine to what degree the experience described in the question applies to you, and circle the number to show what percentage of the time you have the experience.

Example:

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<tr>
<th>0%</th>
<th>10</th>
<th>20</th>
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<th>70</th>
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<tbody>
<tr>
<td>(never)</td>
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</table>

1. Some people have the experience of driving or riding in a car or bus or subway and suddenly realising that they don't remember what has happened during all or part of the trip. Circle a number to show what percentage of the time this happens to you.

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<tr>
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2. Some people find that sometimes they are listening to someone talk and they suddenly realise that they did not hear part or all of what was just said.

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3. Some people have the experience of finding themselves in a place and having no idea how they got there.

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4. Some people have the experience of finding themselves dressed in clothes that they don't remember putting on.

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5. Some people have the experience of finding new things in their belongings that they do not remember buying.

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6. Some people sometimes find that they are approached by people that they do not know, who call them by another name or insist that they have met them before.

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7. Some people sometimes have the experience of feeling as though they are standing next to themselves or watching themselves do something and they actually see themselves as if they were looking at another person.

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<th>100%</th>
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</table>

8. Some people are told that they sometimes do not recognise friends or family members.
9. Some people find that they have no memory for some important events in their lives (for example, a wedding or graduation).

10. Some people have the experience of being accused of lying when they do not think that they have lied.

11. Some people have the experience of looking in a mirror and not recognising themselves.

12. Some people sometimes have the experience of feeling that other people, objects, and the world around them are not real.

13. Some people sometimes have the experience of feeling that their body does not seem to belong to them.

14. Some people have the experience of sometimes remembering a past event so vividly that they feel as if they were reliving the event.

15. Some people have the experience of not being sure whether things that they remember happening really did happen or whether they just dreamed them.

16. Some people have the experience of being in a familiar place but finding it strange and unfamiliar.

17. Some people find that when they are watching television or a movie they become so absorbed in the story that they are unaware of other events happening around them.

18. Some people find that they become so involved in a fantasy or daydream that it feels as though it were really happening to them.

19. Some people find that they sometimes are able to ignore pain.
20. Some people find that they sometimes sit staring off into space, thinking of nothing, and are not aware of the passage of time.

21. Some people sometimes find that when they are alone they talk out loud to themselves.

22. Some people find that in one situation they may act so differently compared with another situation that they feel almost as if they were two different people.

23. Some people sometimes find that in certain situations they are able to do things with amazing ease and spontaneity that would usually be difficult for them (for example, sports, work, social situations, etc.).

24. Some people sometimes find that they cannot remember whether they have done something or have just thought about doing that thing (for example, not knowing whether they have just mailed a letter or have just thought about mailing it).

25. Some people find evidence that they have done things that they do not remember doing.

26. Some people sometimes find writings, drawings, or notes among their belongings that they must have done but cannot remember doing.

27. Some people sometimes find they hear voices inside their head that tell them to do things or comment on things that they are doing.

28. Some people sometimes feel as if they are looking at the world through a fog, so that people and objects appear far away or unclear.
SECTION D:

Please indicate how many times you have ever experienced each of the potentially traumatic events listed below by circling one of the frequencies: never, once, a few times, or many times. If you are confused about, or do not clearly remember if you experienced the traumatic event, circle the question mark ("?"). For each event you have experienced at least once, please write in the blank space to the far right your age at the time (e.g., "34"). If you experienced the event more than once over a period of more than one year, write in the age range (e.g., "13-17"). If you are not sure of your age at the time, please make your best estimate.

Legend for the Chart:

A - Type of Trauma
B - Frequency of Experience
C - Age Range

A – Type of trauma

<table>
<thead>
<tr>
<th>B – Frequency of experience</th>
<th>C – Age range</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Learning of the sudden death or serious injury of a spouse, child, parent, close relative or friend</td>
<td>Never, Once, A few times, Many times, ?</td>
</tr>
<tr>
<td>2. Witnessing someone being killed, maimed, or seriously injured</td>
<td>Never, Once, A few times, Many times, ?</td>
</tr>
<tr>
<td>3. Being in an accident that was life-threatening or resulted in serious injury</td>
<td>Never, Once, A few times, Many times, ?</td>
</tr>
<tr>
<td>4. Being in a natural disaster (fire, flood, earthquake, tornado) that was life-threatening or resulted in serious injury</td>
<td>Never, Once, A few times, Many times, ?</td>
</tr>
<tr>
<td>5. Having a life-threatening illness</td>
<td>Never, Once, A few times, Many times, ?</td>
</tr>
<tr>
<td>6. Being physically threatened, assaulted, or attacked</td>
<td>Never, Once, A few times, Many times, ?</td>
</tr>
<tr>
<td>7. Surviving a completed rape (someone had sexual intercourse with you when you did not want to by threatening you or using force)</td>
<td>Never, Once, A few times, Many times, ?</td>
</tr>
<tr>
<td>8. Surviving an attempted rape (someone tried to have sexual intercourse with you when you did not want to by threatening you or using force)</td>
<td>Never, Once, A few times, Many times, ?</td>
</tr>
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<td>A</td>
<td>B</td>
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<tr>
<td>9. Being sexually molested (someone touched or felt your genitals when you did not want them to)</td>
<td>Never, Once, A few times, Many times, ?</td>
</tr>
<tr>
<td>10. Being in a military combat or a war zone</td>
<td>Never, Once, A few times, Many times, ?</td>
</tr>
<tr>
<td>11. Being imprisoned or held captive</td>
<td>Never, Once, A few times, Many times, ?</td>
</tr>
<tr>
<td>12. Being tormented, terrified, stalked, or humiliated by someone repeatedly and intentionally</td>
<td>Never, Once, A few times, Many times, ?</td>
</tr>
<tr>
<td>13. Being physically tortured by someone</td>
<td>Never, Once, A few times, Many times, ?</td>
</tr>
<tr>
<td>14. Accidentally causing serious injury or death to another person</td>
<td>Never, Once, A few times, Many times, ?</td>
</tr>
</tbody>
</table>

**SECTION E:**

These questions ask about some of your experiences growing up as a child and a teenager. Although these questions are of a personal nature, please try to answer as honestly as you can.

For each question, circle the number that corresponds to the response that best describes how you feel. If you wish to change your response, put an X through it and circle your new choice.

1 = never true,  
2 = rarely true,  
3 = sometimes true,  
4 = often true,  
5 = very often true.

**When I was growing up:**

1. I didn't have enough to eat.  
2. I knew that there was someone to take care of me and protect me.  
3. People in my family called me things like "stupid," "lazy," or "ugly."  
4. My parents were too drunk or high to take care of the family.  
5. There was someone in my family who helped me feel that I was important or special.  
6. I had to wear dirty clothes.  
7. I felt loved.
1 = never true,  
2 = rarely true,  
3 = sometimes true,  
4 = often true,  
5 = very often true.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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<tbody>
<tr>
<td>8</td>
<td>I thought my parents wished I had never been born.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9</td>
<td>I got hit so hard by someone in my family that I had to see a doctor or go to the hospital.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10</td>
<td>There was something I wanted to change about my family.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11</td>
<td>People in my family hit me so hard it left me with bruises or marks.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<tr>
<td>12</td>
<td>I was punished with a belt, a board, a cord, or some other hard object.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13</td>
<td>People in my family looked out for each other.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14</td>
<td>People in my family said hurtful or insulting things to me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>15</td>
<td>I believe that I was physically abused.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>16</td>
<td>I had the perfect childhood.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>17</td>
<td>I got hit or beaten so badly that it was noticed by someone like a teacher, neighbour or doctor.</td>
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<td>2</td>
<td>3</td>
<td>4</td>
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<tr>
<td>18</td>
<td>I felt that someone in my family hated me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>5</td>
</tr>
<tr>
<td>19</td>
<td>People in my family felt close to each other.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<tr>
<td>20</td>
<td>Someone tried to touch me in a sexual way, or tried to make me touch them.</td>
<td>1</td>
<td>2</td>
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<tr>
<td>21</td>
<td>Someone threatened to hurt me or tell lies about me unless I did something sexual with them.</td>
<td>1</td>
<td>2</td>
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<tr>
<td>22</td>
<td>I had the best family in the world.</td>
<td>1</td>
<td>2</td>
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<tr>
<td>23</td>
<td>Someone tried to make me do sexual things or watch sexual things.</td>
<td>1</td>
<td>2</td>
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<td>5</td>
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<tr>
<td>24</td>
<td>Someone molested me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>5</td>
</tr>
<tr>
<td>25</td>
<td>I believe that I was emotionally abused.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<tr>
<td>26</td>
<td>There was someone to take me to the doctor if I needed it.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>27</td>
<td>I believe that I was sexually abused.</td>
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<td>2</td>
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<td>28</td>
<td>My family was a source of strength and support.</td>
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SECTION F:
The following items deal with ways you coped with a negative event in your life. Please use the **most stressful** experience you identified while completing Sections D and E of this questionnaire as the stressful life experience. You may like to describe the event in a few words below:

________________________________________________________________________________
________________________________________________________________________________
________________________________________________________________________________

How stressful did you find this event? Please circle a number:

1 2 3 4 5 6 7 8 9
not very extremely

Below is a list of problems and complaints that people sometimes have in response to stressful life experiences. Please read each one carefully, and then circle one of the numbers to the right to indicate how much you have been bothered by that problem in the last month:

1. Repeated disturbing *memories, thoughts, or images* of the stressful experience?

   Not at all   A little bit   Moderately   Quite a bit   Extremely
   1           2            3            4            5

2. Repeated disturbing *dreams* of the stressful experience?

   1           2            3            4            5

3. Suddenly *acting or feeling* as if the stressful experience were happening again (as if you were reliving it)?

   1           2            3            4            5

4. Feeling *very upset* when something reminded you of the stressful experience?

   1           2            3            4            5

5. Having *physical reactions* (e.g., heart pounding, trouble breathing, sweating) when something reminded you of the stressful experience?

   1           2            3            4            5

6. Avoiding *thinking about or talking* about the stressful experience or avoiding having *feelings* related to it?

   1           2            3            4            5

7. Avoiding *activities or situations* because they remind you of the stressful experience?

   1           2            3            4            5

8. Trouble *remembering important parts* of the stressful experience?

   1           2            3            4            5

9. *Loss of interest* in activities that you used to enjoy?

   1           2            3            4            5

10. Feeling *distant or cut off* from other people?

    1           2            3            4            5

11. Feeling *emotionally numb* or being *unable to have loving feelings* to those
12. Feelings as if your future somehow will be cut short?

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<th></th>
<th>Not at all</th>
<th>A little bit</th>
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13. Trouble falling or staying asleep?

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14. Feeling irritable or having angry outbursts?

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15. Having difficulty concentrating?

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16. Being "superalert" or watchful or on guard?

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17. Feeling jumpy or easily startled?

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<th>A little bit</th>
<th>Moderately</th>
<th>Quite a bit</th>
<th>Extremely</th>
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<td>3</td>
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<td>4</td>
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<td>5</td>
<td></td>
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<td></td>
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</tr>
</tbody>
</table>

SECTION G:

Circle "Yes" if you agree with the statements below, "no" if you don't agree.

1. As a child, I thought the dolls, teddy bears, and stuffed animals that I played with were living creatures

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. As a child, I strongly believed in the existence of dwarfs, elves, and other fairy tale figures

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>

3. As a child I had my own make believe friend or animal

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

4. As a child, I could very easily identify with the main character of a story and/or movie

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

5. As a child, I sometimes had the feeling that I was someone else (e.g., a princess, an orphan, etc.)

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

6. As a child, I was encouraged by adults (parents, grandparents, brothers, sisters) to fully indulge myself in my fantasies and daydreams

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

7. As a child, I often felt lonely

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

8. As a child, I devoted my time to playing a musical instrument, dancing, acting, and/or drawing

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>

9. I spend more than half the day (daytime) fantasising or daydreaming

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10. Many of my friends and/or relatives do not know that I have such detailed fantasies

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

11. Many of my fantasies have a realistic intensity

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12. Many of my fantasies are often just as lively as a good movie

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

13. I often confuse fantasies with real memories

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
14. I am never bored because I start fantasising when things get boring
   Yes   No

15. Sometimes I act as if I am somebody else and I completely identify myself with that role
   Yes   No

16. When I recall my childhood, I have very vivid and lively memories
   Yes   No

17. I can recall many occurrences before the age of three
   Yes   No

18. When I perceive violence on television, I get so into it that I get really upset
   Yes   No

19. When I think of something cold, I actually get cold
   Yes   No

20. When I imagine I have eaten rotten food, I really get nauseous
    Yes   No

21. I often have the feeling that I can predict things that are bound to happen in the future
    Yes   No

22. I often have the experience of thinking of someone and soon afterwards that particular person calls or shows up
    Yes   No

23. I sometimes feel that I have had an out of body experience
    Yes   No

24. When I sing or write something, I sometimes have the feeling that someone or something outside myself directs me
    Yes   No

25. During my life, I have had intense religious experiences which influenced me in a very strong manner
    Yes   No

SECTION H: Personal Profile

1. Are you male or female?     1. Male      2. Female

2. What is your age in years? ___________

3. Circle the number that best describes your marital status at the moment:
   1. Single, never in a marital-type relationship
   2. In a relationship, living separately
   3. Married/in a marital-type relationship for the first time
   4. Married/in a marital-type relationship, married previously
   5. Divorced or separated
   6. Widowed
   7. Other _______________________

4. Do you consider yourself to have an ethnic background?
   1. No   2. Yes

   If “yes”, what is your background? _______________________
5. Please circle the number that best indicates the education level you have completed so far:

1. Completed year 11 or below
2. Completed year 12
3. Partially completed a certificate or diploma
4. Completed a certificate or diploma
5. Partially completed a degree
6. Completed a degree
7. Doing a post-graduate degree
8. Completed a post-graduate degree

6. Please circle the number that best describes your employment situation at the moment:

1. Employed full time
2. Employed part time
3. Full time student
4. Part time student
5. Home duties/child care
6. Unemployed
7. Retired

Other (specify) ___________________________

7. If employed, what is your occupation?

...........................................................................................................................................................................
...........................................................................................................................................................................

8. Are you currently, or have been in the past, in therapy for symptoms related to past trauma in your life? Yes No

If "yes," for how long have you had therapy?

...........................................................................................................................................................................
...........................................................................................................................................................................

Date you completed this questionnaire: __/__/__

Please turn to the last page to give contact details if you are willing to participate in Stage 2 of this study.
Thank you for taking the time to participate in Stage 1 of the research project: "An Exploration of Dissociation"

We would like to follow up some respondents who complete and return this questionnaire. People who give us their contact details may be asked if they would like to participate in Stage 2.

If you are happy to be contacted by us, please give your name and contact details below. Giving your details at this time does not mean you are consenting to participate in Stage 2. If we contact you, you will be given further information to enable you to make an informed decision at that time.

Name: ………………………………………………………………….
Address: ……………………………………………………………..
……………………………………………………………………
Phone: ………………………………………………………………
Email: ………………………………………………………………...
Appendix A.7: Sample Format for Internet Questionnaire, Study 2

An Exploration of Dissociation

My name is Helene Richardson, and I am a Doctoral student studying Psychology at Swinburne University under the supervision of Dr. Greg Murray. I am undertaking a research project that aims to explore a coping strategy many people use, that of dissociation. Many clinicians believe that dissociation can be anything from daydreaming or getting "lost" in a movie or book, to profound alterations in memory and identity that can result in serious impairment or inability to function.

I would like to invite you to participate in this project. It is a series of studies designed to deepen our understanding of dissociation. There are two studies in this project that you can assist with. Participation in both studies is voluntary. If you wish to participate, you will be asked to fill in a questionnaire for Study 1, that involves answering questions about your personality, your coping style, your trauma experience, and your dissociative experiences by circling the appropriate answer to each question. You will also be asked for more general information, such as age, gender, marital status, ethnicity, education, and experience of therapy. It should take you about 45 - 50 minutes to complete. The results of this study may be presented as conference papers or published in a scientific journal. However, only group data will be presented and no individual will be identifiable. Your participation is completely voluntary, and an initial decision to participate does not stop you from withdrawing from the study at any time. Submission of this questionnaire will be taken as consent for your data to be used in Study 1.

In Study 2, I am interested in understanding what dissociation is like for you as an individual. To address this question, we will use a modified version of the Revised Clinical Dissociation Scale (Revised CDS). Your responses will be kept strictly confidential. I hope that our work will lead to a better understanding of this fascinating phenomenon.

An Exploration of Dissociation

SECTION A: Your personality
Please read each of the statements below and indicate using the scale shown how much you think the statement is true or false, or how much you agree or disagree with the statement.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree or definitely false</th>
<th>Disagree or mostly false</th>
<th>Neutral or equally true or false</th>
<th>Agree or mostly true</th>
<th>Strongly agree or definitely true</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am not a worrier.</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐</td>
</tr>
<tr>
<td>I like to have a lot of people around me.</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐</td>
</tr>
<tr>
<td>I don’t like to waste my time daydreaming.</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐</td>
</tr>
<tr>
<td>I try to be courteous to everyone I meet.</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐</td>
</tr>
<tr>
<td>I keep my belongings clean and neat.</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐</td>
</tr>
<tr>
<td>I often feel inferior to others.</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐</td>
</tr>
</tbody>
</table>
An Exploration of Dissociation

### Section A: Your Personality (Continued)

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree or definitely false</th>
<th>Disagree or mostly false</th>
<th>Neutral or equally true or false</th>
<th>Agree or mostly true</th>
<th>Strongly agree or definitely true</th>
</tr>
</thead>
<tbody>
<tr>
<td>I try to perform all the tasks assigned to me conscientiously.</td>
<td>★</td>
<td>◆</td>
<td>◆</td>
<td>◆</td>
<td>★</td>
</tr>
<tr>
<td>I often feel tense and jittery.</td>
<td>★</td>
<td>◆</td>
<td>◆</td>
<td>◆</td>
<td>★</td>
</tr>
<tr>
<td>I like to be where the action is.</td>
<td>★</td>
<td>◆</td>
<td>◆</td>
<td>◆</td>
<td>★</td>
</tr>
<tr>
<td>Poetry has little or no effect on me.</td>
<td>★</td>
<td>◆</td>
<td>◆</td>
<td>◆</td>
<td>★</td>
</tr>
<tr>
<td>I tend to be cynical and sceptical of others’ intentions.</td>
<td>★</td>
<td>◆</td>
<td>◆</td>
<td>◆</td>
<td>★</td>
</tr>
<tr>
<td>I have a clear set of goals and work toward them in an orderly manner.</td>
<td>★</td>
<td>◆</td>
<td>◆</td>
<td>◆</td>
<td>★</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree or definitely false</th>
<th>Disagree or mostly false</th>
<th>Neutral or equally true or false</th>
<th>Agree or mostly true</th>
<th>Strongly agree or definitely true</th>
</tr>
</thead>
<tbody>
<tr>
<td>I’m hard-headed and tough-minded in my attitudes.</td>
<td>★</td>
<td>◆</td>
<td>◆</td>
<td>◆</td>
<td>★</td>
</tr>
<tr>
<td>Sometimes I’m not as dependable or reliable, as I should be.</td>
<td>★</td>
<td>◆</td>
<td>◆</td>
<td>◆</td>
<td>★</td>
</tr>
<tr>
<td>I am seldom sad or depressed.</td>
<td>★</td>
<td>◆</td>
<td>◆</td>
<td>◆</td>
<td>★</td>
</tr>
<tr>
<td>My life is fast-paced.</td>
<td>★</td>
<td>◆</td>
<td>◆</td>
<td>◆</td>
<td>★</td>
</tr>
<tr>
<td>I have little interest in speculating on the nature of the universe or the human condition.</td>
<td>★</td>
<td>◆</td>
<td>◆</td>
<td>◆</td>
<td>★</td>
</tr>
</tbody>
</table>
### An Exploration of Dissociation

#### Section B

Please read each of the statements below and indicate the degree to which you agree or disagree with each statement by selecting a response.

<table>
<thead>
<tr>
<th></th>
<th>Disagree</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>When I make plans I follow through with them</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I usually manage one way or another</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am able to depend on myself more than anyone else</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Keeping interested in things is important to me</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I can be on my own if I have to</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel proud that I have accomplished things in my life</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I usually take things in stride</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am friends with myself</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel that I can handle many things at a time</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Section C

This questionnaire consists of twenty-eight questions about experiences that you may have in your daily life. We are interested in how often you have these experiences. It is important, however, that your answers show how often these experiences happen to you when you are not under the influence of alcohol or drugs.

To answer these questions, please determine to what degree the experience described in the question applies to you, and select a response to show what percentage of the time you have the experience.

<table>
<thead>
<tr>
<th>Percentage of Time</th>
<th>0%</th>
<th>10%</th>
<th>20%</th>
<th>30%</th>
<th>40%</th>
<th>50%</th>
<th>60%</th>
<th>70%</th>
<th>80%</th>
<th>90-100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Response</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Some people have the experience of driving or riding in a car or bus or subway and suddenly realising that they don’t remember what has happened during all or part of the trip. Select a response to show what percentage of the time this happens to you.
An Exploration of Dissociation

Section D:
Please indicate how many times you have ever experienced each of the potentially traumatic events listed below by selecting one of the responses: never, once, a few times, or many times. If you are confused about, or do not clearly remember if you experienced the traumatic event, select the question mark (?)

<table>
<thead>
<tr>
<th>Event</th>
<th>Never</th>
<th>Once</th>
<th>A few times</th>
<th>Many times</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning of the sudden death or serious injury of a spouse, child, parent, close relative or friend</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Witnessing someone being killed, maimed, or seriously injured</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Being in an accident that was life-threatening or resulted in serious injury</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Being in a natural disaster (fire, flood, earthquake, tornado) that was life-threatening or resulted in serious injury</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Having a life-threatening illness</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Being physically threatened, assaulted, or raped</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

An Exploration of Dissociation (continued):

Section D (continued): For only those events you have experienced, please select the age range when the event predominantly occurred. If you are unsure, please make your best estimate.

<table>
<thead>
<tr>
<th>Event</th>
<th>0-5</th>
<th>6-10</th>
<th>11-15</th>
<th>16-20</th>
<th>21-30</th>
<th>31-40</th>
<th>41-50</th>
<th>51-60</th>
<th>61-70</th>
<th>71 or older</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning of the sudden death or serious injury of a spouse, child, parent, close relative or friend</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Witnessing someone being killed, maimed, or seriously injured</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Being in an accident that was life-threatening or resulted in serious injury</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Being in a natural disaster (fire, flood, earthquake, tornado) that was life-threatening or resulted in serious injury</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Having a life-threatening illness</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>


APPENDIX A.8: The DSM-IV-TR Definition of Trauma

The *Diagnostic and Statistical Manual of Mental Disorders, 4th edition, Text Revision* (DSM-IV-TR), defines an extreme traumatic stressor as:

…involving direct, personal experience of an event that involves actual or threatened death or serious injury, or threat to one’s physical integrity; or witnessing an event that involves death, injury, or a threat to the physical integrity of another person; or learning about unexpected or violent death, or harm, or threat of death or injury experienced by a family member or other close associate (Criterion A1). The person’s response to the event must involve intense fear, helplessness, or horror (or in children, the response must involve disorganized or agitated behavior (Criterion A2)… Traumatic events that are experienced directly include, but are not limited to, military combat, violent personal assault (sexual assault, physical attack, robbery, mugging), being kidnapped, being taken hostage, terrorist attack, torture, incarceration as a prisoner of war or in a concentration camp, natural or manmade disasters, severe automobile accidents, or being diagnosed with a life-threatening illness. For children, sexually traumatic events may include developmentally inappropriate sexual experiences without threatened or actual violence or injury. (p.463-464)
Dear Practitioner,

My name is Helene Richardson, and I am a Doctoral student studying Psychology at Swinburne University under the supervision of Dr. Greg Murray. I am undertaking a research project that aims to explore a coping strategy many people use, that of dissociation. Many clinicians believe that dissociation can be anything from daydreaming or getting "lost" in a movie or book, to profound alterations in memory and identity that can result in serious impairment or inability to function.

I would like to invite you to ask any of your clients who have experienced childhood abuse (physical, emotional, sexual or psychological), or who experience dissociative symptoms, to participate in this project.

It is a series of studies designed to deepen our understanding of dissociation. There are two studies in this project that your clients can assist with. Participation in both studies is entirely voluntary. If they consent to participate, they will be asked to fill in a questionnaire for Study 1 that involves answering questions about personality, coping style, trauma experience, and dissociative experiences. It should take about 45 - 50 minutes to complete. The results of this study may be presented as conference papers or published in a scientific journal. However, only group data will be presented and no individual will be identifiable. Participation in Study 1 does not commit your clients to participation in Study 2.

In Study 2, I am interested in understanding what dissociation is like for individuals. Therefore, participation in the second study will be limited to those who obtain high scores in the questionnaire on the measure of dissociation. The aim in Study 2 is to advance the understanding of dissociation by collecting real-time data that links life events, episodes of dissociation and the emotions associated with those events and episodes. Clients who consent to participate in Study 2 will be asked to attend an initial short interview and then to record dissociative episodes over the following two-week period using either a diary or palm pilot. At the end of the two-week period, they will be asked to attend a second, more in-depth interview to debrief. This interview would take about 45 minutes.

It is possible that some of the questions may be distressing to your clients if they have experienced considerable past trauma, and they may experience unpleasant or distressing emotions or thoughts related to the earlier trauma. If this is the case, you are free to contact the student researcher or the principal supervisor.
Any questions or concerns regarding the project entitled "An Exploration of Dissociation," can be directed to the Senior Investigator, Dr Greg Murray on 9214 8300, or the Principle Investigator, Helene Richardson on 9876 1729.

If you have any queries or concerns that Dr Greg Murray was unable to satisfy, contact:

The Chair, SBS Research Ethics Committee  
School of Behavioural Sciences, Mail H24, PO Box 218,  
Swinburne University of Technology, Hawthorn, Victoria 3122

If you have a complaint about the way that your clients were treated during this study, please write to:

The Chair, Human Research Ethics Committee, PO Box 218  
Swinburne University of Technology, Hawthorn, Victoria 3122
An Exploration of Dissociation

Researcher: Helene Richardson
Participants Required: 80 Males/Females
Participation Time: 30 minutes

This research aims to explore the coping mechanism of Dissociation, which many of us use from time to time. Dissociation can be anything from daydreaming or getting "lost" in a movie or book, to profound alterations in memory and identity that can result in serious impairment or inability to function. As a research participant, you will be required to complete a questionnaire that will ask you questions about your personality, your coping style, your trauma experience, and your dissociative experiences, as well as demographic information.

Thank you for your time

Helene Richardson
**What is the study about?** My name is Helene Richardson, and I am a Doctoral student studying Psychology at Swinburne University under the supervision of Dr. Greg Murray. I am undertaking a research project that aims to explore a coping strategy many people use, that of dissociation. Many clinicians believe that dissociation can be anything from daydreaming or getting "lost" in a movie or book, to profound alterations in memory and identity that can result in serious impairment or inability to function. You completed a questionnaire for an earlier study on this topic. Thank you for agreeing to being contacted with an invitation to participate further.

**What am I expected to do?** The aim of Study 2 is to advance the understanding of dissociation by asking you what dissociation is like for you. The interview will initially contain some personal questions about your psychological history and abuse history. Then you will be asked about episodes of dissociation, when they are likely to happen and the emotions associated with those events and episodes. If you consent to participate in Study 2, you will be asked to attend an interview at a time convenient to you, which would take about 2 hours.

If you are willing to participate in Study 2, there are additional issues you need to consider. It would be helpful in the interests of accuracy if the interviews could be audio taped and then transcribed. The tapes and transcripts would be identified only by a code, not your personal information, and both would be securely stored in separate locked cabinets on the University campus.

**How will my privacy be maintained?** Your participation in this study is completely voluntary, and an initial decision to participate does not stop you from withdrawing at any time. If you choose to participate, any information obtained will be completely confidential and de-identified. Any identifying information you give will not be attached to your data. It will be securely stored separately from the data so you will not be able to be identified by anyone but the student researcher. At the end of the study, all identifying data will be destroyed. The results of these studies may be presented as conference papers or published in a scientific journal. However, all personal information will be removed and no individual will be identifiable.

**What if I feel upset by the interview?** Some of the questions may be distressing to you if you have experienced considerable past trauma and you may experience unpleasant or distressing emotions or thoughts related to the earlier trauma. If this is the case, you are free to contact either myself or the principle supervisor, Dr. Greg Murray. You may also wish to be referred to a counsellor if you are not already involved in therapy. You are also free to withdraw from the study at any time. To guard against the possibility of
participants being distressed you will be called 24 hours after the interview. At this time if you would like to reflect further about your responses, we would refer you to a counselling service. Alternatively, you could ring the Swinburne Psychology Clinic on 9214 8653, or Lifeline on 131114.

This research conforms to the principles set out in the Swinburne University of Technology Policy on Research Ethics and the NHMRC guidelines as specified in the National Statement on Ethical Conduct on Research Involving Humans.

Any questions or concerns regarding the project entitled "An Exploration of Dissociation," can be directed to the Senior Investigator, Dr Greg Murray on 9214 8300, or the Principle Investigator, Helene Richardson on 9876 1729.

Other queries:
If you have any queries or concerns that Dr Greg Murray was unable to satisfy, contact:

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The Chair, Human Research Ethics Committee, PO Box 218  
Swinburne University of Technology, Hawthorn, Victoria 3122

Please keep these pages for your information and fill in and return the consent form on the following page if you agree to participate in this study.
Informed Consent Form

I ……………………………………………………………………………………………have read (or, as appropriate, have had read to me) and understood the information above. Any questions I have asked have been answered to my satisfaction. I agree to participate in this activity, realising that I may withdraw at any time. I agree that the interview / activity may be recorded on audio tape as data on the condition that no part of it is included in any presentation or public display. I agree to phrases or sentences from my interview being quoted in any publication as illustrations of the nature of dissociation. I agree that research data collected for the study may be published or provided to other researchers on the condition that anonymity is preserved and that I cannot be identified.

NAME OF PARTICIPANT........................................................................................................... 

SIGNATURE.................................................................................................................. DATE .................

Witness:
Mrs Helene Richardson

SIGNATURE.................................................................................................................. DATE .................
Dear [name]

My name is Helene Richardson, a psychology Doctoral student at Swinburne University. On [date] you [accessed and completed a web-based] [completed a] survey called "An Exploration of Dissociation". You also gave details and indicated that you would be willing to be contacted for possible participation in the next stage of the study.

I would like to know if you are still willing to participate in this study. Further participation would involve attending an interview with me at a place, to be arranged, that is mutually agreeable to both of us.

The interview would take approximately two hours with a break in the middle. The first hour would involve asking questions relating to your medical history, psychiatric history, trauma history, and dissociative symptoms. The second hour would be less formal and centre on your experiences of dissociation and what that is like for you.

With your permission, the interview would be taped for transcribing purposes only and would be destroyed afterwards. No names would be attached to the tape or any other recorded information. I will use identifying codes known only to me.

I am looking forward to hearing from you.

Kind regards,

Helene Richardson

Contact details:
Mobile: 0439 632 598
Email: riccos@bigpond.net.au
Like all psychiatric disorders, the gold standard for diagnosing trauma-related disorders is the clinical interview. Throughout psychiatry, standardized methods of history taking are also employed for systematic clinical assessment and research - these are called structured interviews. In the trauma field there are several structured interviews in use, including the Dissociative Disorders Interview Schedule (DDIS), developed by Dr. Ross. Data from the DDIS appear in many of the scientific papers listed under Publications on this web site. The full text and scoring rules of the DDIS appear below. Clinical diagnoses should not be made using the DDIS alone. The DDIS should not be used for making clinical or research diagnoses by persons who are not mental health professionals or who are not acting under the supervision or in consultation with qualified mental health professionals. The DDIS has been placed on this web site as an educational service only.

The Dissociative Disorders Interview Schedule - DSM-IV Version
The Dissociative Disorders Interview Schedule (DDIS) is a highly structured interview which makes DSM-IV diagnoses of somatization disorder, borderline personality disorder and major depressive disorder, as well as all the dissociative disorders. It inquires about positive symptoms of schizophrenia, secondary features of DID, extrasensory experiences, substance abuse and other items relevant to the dissociative disorders. The DDIS can usually be administered in 30-45 minutes.

Permission to copy and distribute is granted by Colin A. Ross, M.D.
Consent Form for the Dissociative Disorders Interview Schedule

I agree to be interviewed as part of a research project on dissociative disorders. Dissociative disorders involve problems with memory. I understand that the interview contains some personal questions about my sexual and psychological history, however, all information that I give will be kept confidential. My name will not appear on the research questionnaire. I understand that my answers will have no direct effect on how I am treated in the future. I understand that the overall results of this research will be published and these results will be available to authorities or therapists involved with me. I understand that the interviewer and other researchers cannot offer me treatment. I understand that the purpose of this interview is for research and that I cannot expect any direct benefit to myself other than knowing that I have helped the researchers understand dissociative disorders better.

I agree to answer the interviewer's questions as well as I can but I know that I am free not to answer any particular questions I do not want to answer.

Although I have signed my name to this form, I know that it will be kept separate from my answers and that my answers cannot be connected to my name, except by the interviewer and his/her research colleagues.

I also understand that I may be asked to participate in further dissociative disorders interviews in the future, but that I will be free to say no. If I do say no this will have no consequences for me and any authorities or therapists involved with me will not be told of my decision not to be interviewed again.

Signed: ___________________________ Witness: ___________________________
Date: ___________________________
Demographic Data for Dissociative Disorders

INTERVIEW SCHEDULE
Age: [ ] [ ]
Male=1 Female=2 [ ]
Single = 1 Married (including common-law) = 2
Status: Separated/Divorced = 3 Widowed = 4 [ ]
Number of Children: (If no children, score 0) [ ]
Occupational Status: Employed = 1 Unemployed = 2 [ ]
Have you been in jail in the past?
Yes = 1 No = 2 Unsure = 3 [ ]
Physical diagnoses currently active: [ ]

Current and past diagnoses must consist of written diagnoses provided by the referring physician or available in the patient's chart (give DSM-IV codes if possible, if not write DSM-IV diagnoses to the right of the brackets).
Psychiatric diagnoses currently active: [ ]

Psychiatric diagnoses currently in remission: [ ]

Dissociative Disorders Interview Schedule
DSM-IV Version

Questions in the Dissociative Disorders Interview Schedule must be asked in the order they occur in the Schedule. All the items in the Schedule, including all the items in the DSM-IV diagnostic criteria for dissociative disorders, somatization disorder, and borderline personality disorder must be inquired about. The wording of the questions should be exactly as written in order to standardize the information gathered by different interviewers. The interviewer should not read the section headings aloud. The interviewer should open the interview by thanking the subject for his/her participation and then should say:

"Most of the questions I will ask can be answered Yes, No, or Unsure. A few of the questions have different answers and I will explain those as we go along."

1. Somatic Complaints

1. Do you suffer from headaches? Yes=1 No=2 Unsure=3 [ ]

If subject answered No to question 1, go to question 3:
2. Have you been told by a doctor that you have migraine headaches?
Yes=1 No=2 Unsure=3 [ ]

Interviewer should read the following to the subject:
"I am going to ask you about a series of physical symptoms now. To count a symptom as present and to answer yes to these questions, the following must be met:
a) no physical disorder or medical condition has been found to account for the symptom.
b) if there is a related general medical condition, the problems the symptom causes in terms of occupational or social impairment are more than would be expected.
c) the symptom is not caused by a street drug or medication."

**Interviewer should now ask the subject**, "Have you ever had the following physical symptoms for which doctors could find no physical explanation?"

**The interviewer should review criteria a-c for the subject immediately following the first positive response to ensure that the subject has understood.**

3. Abdominal pain (other than when menstruating)
   - Yes=1  No=2  Unsure=3 [ ]

4. Nausea (other than motion sickness)
   - Yes=1  No=2  Unsure=3 [ ]

5. Vomiting (other than motion sickness)
   - Yes=1  No=2  Unsure=3 [ ]

6. Bloating (gassy)
   - Yes=1  No=2  Unsure=3 [ ]

7. Diarrhoea
   - Yes=1  No=2  Unsure=3 [ ]

8. Intolerance of (gets sick on) several different foods
   - Yes=1  No=2  Unsure=3 [ ]

9. Back pain
   - Yes=1  No=2  Unsure=3 [ ]

10. Joint pain
    - Yes=1  No=2  Unsure=3 [ ]

11. Pain in extremities (the hands and feet)
    - Yes=1  No=2  Unsure=3 [ ]

12. Pain in genitals other than during intercourse
    - Yes=1  No=2  Unsure=3 [ ]

13. Pain during urination
    - Yes=1  No=2  Unsure=3 [ ]

14. Other pain (other than headaches)
    - Yes=1  No=2  Unsure=3 [ ]

15. Shortness of breath when not exerting oneself
    - Yes=1  No=2  Unsure=3 [ ]

16. Palpitations (a feeling that your heart is beating very strongly)
    - Yes=1  No=2  Unsure=3 [ ]

17. Chest pain
    - Yes=1  No=2  Unsure=3 [ ]

18. Dizziness
    - Yes=1  No=2  Unsure=3 [ ]

19. Difficulty swallowing
    - Yes=1  No=2  Unsure=3 [ ]

20. Loss of voice
    - Yes=1  No=2  Unsure=3 [ ]

21. Deafness
    - Yes=1  No=2  Unsure=3 [ ]

22. Double vision
    - Yes=1  No=2  Unsure=3 [ ]

23. Blurred vision
    - Yes=1  No=2  Unsure=3 [ ]
24. Blindness
   Yes=1 No=2 Unsure=3
25. Fainting or loss of consciousness
   Yes=1 No=2 Unsure=3
26. Amnesia
   Yes=1 No=2 Unsure=3
27. Seizure or convulsion
   Yes=1 No=2 Unsure=3
28. Trouble walking
   Yes=1 No=2 Unsure=3
29. Paralysis or muscle weakness
   Yes=1 No=2 Unsure=3
30. Urinary retention or difficulty urinating
   Yes=1 No=2 Unsure=3
31. Long periods with no sexual desire
   Yes=1 No=2 Unsure=3
32. Pain during intercourse
   Yes=1 No=2 Unsure=3

Note: If subject is male ask question 33 and then go to question 38. If female, go to question 34.
33. Impotence
   Yes=1 No=2 Unsure=3
34. Irregular menstrual periods
   Yes=1 No=2 Unsure=3
35. Painful menstruation
   Yes=1 No=2 Unsure=3
36. Excessive menstrual bleeding
   Yes=1 No=2 Unsure=3
37. Vomiting throughout pregnancy
   Yes=1 No=2 Unsure=3
38. Have you had many physical symptoms over a period of several years beginning before the age of 30 that resulted in your seeking treatment or which caused occupational or social impairment?
   Yes=1 No=2 Unsure=3
39. Were the physical symptoms you described deliberately produced by you?
   Yes=1 No=2 Unsure=3

II. Substance Abuse
40. Have you ever had a drinking problem?
   Yes=1 No=2 Unsure=3
41. Have you ever used street drugs extensively?
   Yes=1 No=2 Unsure=3
42. Have you ever injected drugs intravenously?
   Yes=1 No=2 Unsure=3
43. Have you ever had treatment for a drug or alcohol problem?
   Yes=1 No=2 Unsure=3

III. Psychiatric History
44. Have you ever had treatment for an emotional problem or mental disorder?
45. Do you know what psychiatric diagnoses, if any, you have been given in the past?
   Yes=1 No=2 Unsure=3

46. Have you ever been diagnosed as having:
   a) depression [ ]
   b) mania [ ]
   c) schizophrenia [ ]
   d) anxiety disorder [ ]
   e) other psychiatric disorder (specify) [ ]

If subject did not volunteer a diagnosis for 46 (e) go to question 48.

47. If the subject volunteered diagnoses for (e), did the subject volunteer any of the following:
   a) dissociative amnesia [ ]
   b) dissociative fugue [ ]
   c) dissociative identity disorder (multiple personality disorder) [ ]
   d) depersonalization disorder [ ]
   e) dissociative disorder not otherwise specified [ ]

48. Have you ever been prescribed psychiatric medication?
   Yes=1 No=2 Unsure=3

49. Have you ever been prescribed one of the following medications?
   a) antipsychotic [ ]
   b) antidepressant [ ]
   c) lithium [ ]
   d) anti-anxiety or sleeping medication [ ]
   e) other (specify) ________________________________ [ ]

50. Have you ever received ECT, also known as electroshock treatment?
   Yes=1 No=2 Unsure=3

51. Have you ever had therapy for emotional, family, or psychological problems, for more than 5 sessions in one course of treatment?
   Yes=1 No=2 Unsure=3

52. How many therapists, if any, have you seen for emotional problems or mental illness in your life.
   Unsure=89

If subject answered No to both questions 51 and 52, go to question 54.

53. Have you ever had a treatment for an emotional problem or mental illness which was ineffective?
   Yes=1 No=2 Unsure=3

IV. Major Depressive Episode
The purpose of this section is to determine whether the subject has ever had or currently has a major depressive episode.

54. Have you ever had a period of depressed mood lasting at least two weeks in which you felt depressed, blue, hopeless, low, or down in the dumps?
   Yes=1 No=2 Unsure=3

If subject answered No to question 54, go to question 62.
If subject answered Yes or Unsure, interviewer should ask, "During this period did you experience the following symptoms nearly every day for at least two weeks?"

55. Poor appetite or significant weight loss (when not dieting) or increased appetite or significant weight gain.
   Yes=1 No=2 Unsure=3

56. Sleeping too little or too much.
   Yes=1 No=2 Unsure=3

57. Being physically and mentally slowed down, or agitated to the point where it was noticeable to other people.
   Yes=1 No=2 Unsure=3

58. Loss of interest or pleasure in usual activities, or decrease in sexual drive.
   Yes=1 No=2 Unsure=3

59. Loss of energy or fatigue nearly every day.
   Yes=1 No=2 Unsure=3

60. Feelings of worthlessness, self-reproach, or excessive or inappropriate guilt nearly every day.
   Yes=1 No=2 Unsure=3

61. Difficulty concentrating or difficulty making decisions.
   Yes=1 No=2 Unsure=3

62. Recurrent thoughts of death, suicidal thoughts, wishes to be dead, or attempted suicide.
   Yes=1 No=2 Unsure=3

If you have made a suicide attempt, did you:
   a) take an overdose [ ]
   b) slash your wrists or other body areas [ ]
   c) inflict cigarette burns or other self injuries [ ]
   d) use a gun, knife, or other weapons [ ]
   e) attempt hanging [ ]
   f) use another method [ ]
   Yes=1 No=2 Unsure=3

63. If you have had an episode of depression as described above, is it:
   currently active, first occurrence =1
   currently in remission =2
   currently active, recurrence =3
   uncertain =4
   due to a specific organic cause =5

V. Positive Symptoms of Schizophrenia (Schneiderian First Rank Symptoms)

64. Have you ever experienced the following
   Yes=1 No=2 Unsure=3
   a) voices arguing in your head [ ]
   b) voices commenting on your actions [ ]
   c) having your feelings made or controlled by someone or something outside you [ ]
   d) having your thoughts made or controlled by someone or something outside you [ ]
   e) having your actions made or controlled by someone or something outside you [ ]
   f) Influences from outside you playing on or affecting your body such as some external force or power. [ ]
   g) having thoughts taken out of your mind [ ]
   h) thinking thoughts which seemed to be someone else's [ ]
   i) hearing your thoughts out loud [ ]
   j) other people being able to hear your thoughts as if they're out loud [ ]
   k) thoughts of a delusional nature that were very out of touch with reality [ ]
If subject answered No to all schizophrenia symptoms, go to question 67, otherwise, interviewer should ask:
"If you have experienced any of the above symptoms are they clearly limited to one of the following:"
65. Occurred only under the influence of drugs, or alcohol.
   Yes=1 No=2 Unsure= 3 [ ]
66. Occurred only during a major depressive episode.
   Yes=1 No=2 Unsure= 3 [ ]

VI. Trances, Sleepwalking, Childhood Companions
67. Have you ever walked in your sleep?
   Yes=1 No=2 Unsure= 3 [ ]
If subject answered No to question 67, go to question 69.
68. If you have walked in your sleep, how many times roughly?
   1-10=1 ; 11-50=2 ; >50= 4 ; Unsure=3 [ ]
69. Have you ever had a trance-like episode where you stare off into space, lose awareness of what is going on around you and lose track of time?
   Yes=1 No=2 Unsure= 3 [ ]
If subject answered No to question 69, go to question 71.
70. If you have had this experience, how many times, roughly?
   1-10=1 ; 11-50=2 ; >50=3 ; Unsure=4 [ ]
71. Did you have imaginary playmates as a child?
   Yes=1 No=2 Unsure= 3 [ ]
If subject answered No to question 69, go to question 71.
72. If you had imaginary playmates, how old were you when they stopped. Unsure=0 [ ]
If subject still has imaginary companions score subject's current age.

VIII. Childhood Abuse
73. Were you physically abused as a child or adolescent?
   Yes=1 No=2 Unsure= 3 [ ]
If subject answered No to question 73, go to question 78.
74. Was the physical abuse independent of episodes of sexual abuse?
   Yes=1 No=2 Unsure= 3 [ ]
75. If you were physically abused, was it by:
a) father [ ]
b) mother [ ]
c) stepfather [ ]
d) stepmother [ ]
e) brother [ ]
f) sister [ ]
g) male relative [ ]
h) female relative [ ]
i) other male [ ]
j) other female [ ]
   Yes=1 No=2 Unsure= 3
76. If you were physically abused, how old were you when it started?
   Unsure=89. If less than 1 year, score 0. [ ]
77. If you were physically abused how old were you when it stopped?
   Unsure=89 If less than 1 year, score 0. If ongoing score subject's current age. [ ]
78. Were you sexually abused as a child or adolescent? Sexual abuse includes rape, or any type of unwanted sexual touching or fondling that you may have experienced.
Yes=1 No=2 Unsure= 3 [ ]
If the subject answered No to question 78, go to question 85. If the subject answered Yes or Unsure to question 78, the interviewer should state the following before asking further questions on sexual abuse:
"The following questions concern detailed examples of the types of sexual abuse you may or may not have experienced. Because of the explicit nature of these questions, you have the option not to answer any or all of them. The reason I am asking these questions is to try to determine the severity of the abuse that you experienced. You may answer Yes, No, Unsure or not give an answer to each question."

79. If you were sexually abused, was it by:
a) father [ ]  
b) mother [ ]  
c) stepfather [ ]  
d) stepmother [ ]  
e) brother [ ]  
f) sister [ ]  
g) male relative [ ]  
h) female relative [ ]  
i) other male [ ]  
j) other female [ ]  
Yes=1 No=2 Unsure= 3 No Answer=4
If subject is female skip question 80. If male skip question 81.

80. If you are male and were sexually abused, did the abuse involve:
a) hand to genital touching [ ]  
b) other types of fondling [ ]  
c) intercourse with a female [ ]  
d) anal intercourse with a male - you active [ ]  
e) you performing oral sex on a male [ ]  
f) you performing oral sex on a female [ ]  
g) oral sex done to you by a male [ ]  
h) oral sex done to you by a female [ ]  
i) anal intercourse - you passive [ ]  
j) enforced sex with animals [ ]  
k) pornographic photography [ ]  
l) other (specify) ______________________________ [ ]  
Yes=1 No=2 Unsure= 3 No Answer=4

81. If you are female and were sexually abused, did the abuse involve:
a) hand to genital touching [ ]  
b) other types of fondling [ ]  
c) intercourse with a male [ ]  
d) simulated intercourse with a female [ ]  
e) you performing oral sex on a male [ ]  
f) you performing oral sex on a female [ ]  
g) oral sex done to you by a male [ ]  
h) oral sex done to you by a female [ ]  
i) anal intercourse with a male [ ]  
j) enforced sex with animals [ ]
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k) pornographic photography [ ]  
l) other (specify) ____________________________ [ ]  
Yes=1 No=2 Unsure=3 No Answer=4
82. If you were sexually abused, how old were you when it started?  
Unsure=89. If less than 1 year, score 0. [ ]
83. If you were sexually abused, how old were you when it stopped?  
Unsure=89 If less than 1 year, score 0. If ongoing score subject's current age. [ ]
84. How many separate incidents of sexual abuse were you subjected to up until the age of 18?  
1-5=1; 6-10=2; 11-50=3; >50=4; Unsure=5; [ ]
85. How many separate incidents of sexual abuse were you subjected to after the age of 18?  
0=1; 1-5=2; 6-10=3; 11-50=4; >50=5; Unsure=6 [ ]

VIII. Features Associated with Dissociative Identity Disorder
For questions 86-95, if subject answers Yes, ask subject to specify whether it is  
occasionally, fairly often or frequently, excluding question 93.
86. Have you ever noticed that things are missing from your personal possessions or where you live?  
Never=1; Occasionally=2; Fairly Often=3; Frequently=4; Unsure=5; [ ]
87. Have you ever noticed that there are things present where you live, and you don't know  
where they came from or how they got there? e.g. clothes jewelry, books, furniture.  
Never=1 Occasionally=2 Fairly Often=3 Frequently=4 Unsure=5 [ ]
88. Have you ever noticed that your handwriting changes drastically or that there are things  
around in handwriting you don't recognize?  
Never=1 Occasionally=2 Fairly Often=3 Frequently=4 Unsure=5 [ ]
89. Do people ever come up and talk to you as if they know you but you don't know them, or  
only know them faintly?  
Never=1 Occasionally=2 Fairly Often=3 Frequently=4 Unsure=5 [ ]
90. Do people ever tell you about things you've done or said, that you can't remember, not  
counting times you have been using drugs or alcohol?  
Never=1 Occasionally=2 Fairly Often=3 Frequently=4 Unsure=5 [ ]
91. Do you ever have blank spells or periods of missing time that you can't remember, not  
counting times you have been using drugs or alcohol?  
Never=1 Occasionally=2 Fairly Often=3 Frequently=4 Unsure=5 [ ]
92. Do you ever find yourself coming to in an unfamiliar place, wide awake, not sure how you  
got there, and not sure what has been happening for the past while, not counting times when you  
have been using drugs or alcohol?  
Never=1 Occasionally=2 Fairly Often=3 Frequently=4 Unsure=5 [ ]
93. Are there large parts of your childhood after age 5 which you can't remember?  
Yes=1 No=2 Unsure=3 [ ]
94. Do you ever have memories come back to you all of a sudden, in a flood or like flashbacks?  
Never=1 Occasionally=2 Fairly Often=3 Frequently=4 Unsure=5 [ ]
95. Do you ever have long periods when you feel unreal, as if in a dream, or as if you're not  
really there, not counting when you are using drugs or alcohol?  
Never=1 Occasionally=2 Fairly Often=3 Frequently=4 Unsure=5 [ ]
96. Do you hear voices talking to you sometimes or talking inside your head?  
Yes=1 No=2 Unsure=3 [ ]
If subject answered No to question 96, go to question 98.
97. If you hear voices, do they seem to come from inside you?  
Yes=1 No=2 Unsure=3 [ ]
98. Do you ever speak about yourself as "we" or "us"?
Yes=1  No=2  Unsure=3

99. Do you ever feel that there is another person or persons inside you?
Yes=1  No=2  Unsure=3

If subject answered No to question 99, go to question 102.

100. Is there another person or person inside you that has a name?
Yes=1  No=2  Unsure=3

101. If there is another person inside you, does he or she ever come out and take control of your body?
Yes=1  No=2  Unsure=3

IX. Supernatural/Possession/ESP Experiences/Cults

102. Have you ever had any kind of supernatural experience?
Yes=1  No=2  Unsure=3

103. Have you ever had any extrasensory perception experiences such as:
   a) mental telepathy
   b) seeing the future while awake
   c) moving objects with your mind
   d) seeing the future in dreams
   e) deja vu (the feeling that what is happening to you has happened before)
   f) other (specify) ________________________________
Yes=1  No=2  Unsure=3

104. Have you ever felt you were possessed by a:
   a) demon
   b) dead person
   c) living person
   d) some other power or force
Yes=1  No=2  Unsure=3

105. Have you ever had any contact with:
   a) ghosts
   b) poltergeists (cause noises or objects to move around)
   c) spirits of any kind
Yes=1  No=2  Unsure=3

106. Have you ever felt you know something about past lives or incarnations of yours?
Yes=1  No=2  Unsure=3

107. Have you ever been involved in cult activities?
Yes=1  No=2  Unsure=3

X. Borderline Personality Disorder

Interviewer should state, "For the following nine questions, please answer Yes only if you have been this way much of the time for much of your life."

Have you experienced:

108. Impulsive or unpredictable behavior in at least two areas that are potentially self-damaging, e.g., spending, sex, substance use, reckless driving, binge eating.
Yes=1  No=2  Unsure=3

109. A pattern of intense, unstable personal relationships characterized by your alternating between extremes of positive and negative feelings.
Yes=1  No=2  Unsure=3

110. Intense anger or lack of control of anger, e.g., frequent displays of temper, constant anger, recurrent physical fights.
111. Unstable identity, self-image, or sense of self.
Yes=1 No=2 Unsure=3

112. Frequent mood swings: noticeable shifts from normal mood to depression, irritability or anxiety, usually lasting only a few hours and rarely more than a few days.
Yes=1 No=2 Unsure=3

113. Frantic efforts to avoid real or imagined abandonment.
Yes=1 No=2 Unsure=3

114. Recurrent suicidal behavior, e.g., suicidal attempts, self-mutilation, or threats of suicide.
Yes=1 No=2 Unsure=3

115. Chronic feelings of emptiness.
Yes=1 No=2 Unsure=3

116. Transient, stress-related paranoia or severe dissociative symptoms.
Yes=1 No=2 Unsure=3

If subject answered No or Unsure to question 116, go to 118.

XI. Dissociative Amnesia
117. Have you ever experienced inability to recall important personal information, particularly of a traumatic or stressful nature, that is too extensive to be explained by ordinary forgetfulness?
Yes=1 No=2 Unsure=3

118. If you answered Yes to the previous question was the disturbance due to known physical disorder (e.g., blackouts during alcohol intoxication, or stroke), substance abuse, or another psychiatric disorder?
Yes=1 No=2 Unsure=3

119. Did the symptoms cause you significant distress or impairment in social or occupational function?
Yes=1 No=2 Unsure=3

XII. Dissociative Fugue
If subject answered No to one or both of questions 118 and 119, go to 121.
120. Have you ever experienced sudden unexpected travel away from your home or customary place of work, with inability to recall your past?
Yes=1 No=2 Unsure=3

121. During this period did you experience confusion about your identity or assume a partial or complete new identity?
Yes=1 No=2 Unsure=3

122. If you answered Yes to both the previous two questions was the disturbance due to a known physical disorder? (e.g., blackouts during alcohol intoxication or stroke)?
Yes=1 No=2 Unsure=3

123. Did the symptoms cause you significant distress or impairment in occupational or social function?
Yes=1 No=2 Unsure=3

XIII. Depersonalization Disorder
124. Interviewer should say, "I am now going to ask you a series of questions about depersonalization. Depersonalization means feeling unreal, feeling as if you're in a dream, seeing yourself from outside your body or similar experiences."

a) Have you had one or more episodes of depersonalization sufficient to cause problems in your work or social life?
Yes=1 No=2 Unsure=3
b) Have you ever had the feeling that your feet and hands or other parts of your body have changed in size?  
Yes=1 No=2 Unsure=3  
c) Have you ever experienced seeing yourself from outside your body?  
Yes=1 No=2 Unsure=3  
d) Have you ever had a strong feeling of unreality that lasted for a period of time, not counting when you are using drugs or alcohol?  
Yes=1 No=2 Unsure=3  
If subject did not answer Yes to any of 124 a-d, go to question 127.

125. If you answered Yes to any of the previous questions about depersonalization was the disturbance due to another disorder, such as Schizophrenia, Anxiety Disorder, or epilepsy, substance abuse, or a general medical condition?  
Yes=1 No=2 Unsure=3  
126. During the periods of depersonalization, did you stay in touch with reality and maintain your ability to think rationally?  
Yes=1 No=2 Unsure=3

XIV. Dissociative Identity Disorder
127. Have you ever felt like there are two or more distinct identities or personalities within yourself, each of which has its own pattern of perceiving, thinking, and relating to self and others?  
Yes=1 No=2 Unsure=3  
If subject answered No to question 127, go to question 131.  
128. Do at least two of the identities or personalities recurrently take control of your behavior?  
Yes=1 No=2 Unsure=3

Interviewer should score question 129 based on the subject's response to Question 117, and should not read question 129 aloud.

129. Have you experienced inability to recall important personal information that is too extensive to be explained by ordinary forgetfulness?  
Yes=1 No=2 Unsure=3  
130. Is the problem with different identities or personalities due to substance abuse (e.g. alcohol blackouts) or a general medical condition?  
Yes=1 No=2 Unsure=3

INTERVIEWER SHOULD NOT READ THE FOLLOWING 2 QUESTIONS ALOUD XV.

Dissociative Disorder Not Otherwise Specified
131. Subject appears to have a dissociative disorder but does not satisfy the criteria for a specific dissociative disorder. Examples include trance-like states, derealization unaccompanied by depersonalization, and those more prolonged dissociated states that may occur in persons who have been subjected to periods of prolonged and intense coercive persuasion (brainwashing, thought reform, and indoctrination while captive).  
Yes=1 No=2 Unsure=3

XVI. Concluding Item
132. During the interview, did the subject display unusual, illogical, or idiosyncratic thought processes?  
Yes=1 No=2 Unsure=3
Interviewer should make a brief concluding statement telling subject that there are no more questions, and thanking the subject for his/her participation.

### Scoring The Dissociative Disorders Interview Schedule

The Dissociative Disorders Interview Schedule (DDIS), is divided into 16 sections. Each section is scored independently. All DSM-IV diagnoses are made according to the rules in DSM-IV. There is no total score for the entire interview. However, average scores for 166 dissociative identity disorder (DID) subjects on selected subsections are given below (Ross et. al., Differentiating Multiple Personality Disorder and Dissociative Disorder Not Otherwise Specified, Dissociation, 5, 87-90, 1992).

Following presentation of scoring rules for each section, you will find a description of a typical profile for a DID patient. The DDIS has been administered to over 500 subjects with a confirmed false positive diagnosis of DID in 1% of cases. The sensitivity of the DDIS for the diagnosis of DID in 196 clinically diagnosed cases was 95.4%.

#### I. Somatic Complaints

This is scored according to DSM-IV rules. To receive a diagnosis of somatization disorder by DSM-IV rules one must be positive for a least four pain symptoms, two gastrointestinal symptoms and one sexual symptom and one pseudoneurological symptom:

1. **Pain** - questions 9-14, 17, 32, 35
2. **Gastrointestinal** - questions 3-8
3. **Sexual** - questions 31, 33-37
4. **Pseudoneurological** - questions 19-30

One must also answer "yes" to question 38 and "no" to question 39. A history of somatization disorder distinguishes DID from schizophrenia, eating disorders, and controls, but not from panic disorder. The average number of symptoms positive from questions 3-37 for DID was 14.1. Out of 166 subjects, 39.8% met DSM-III-R criteria for somatization disorder: these data have not been reanalyzed by DSM-IV criteria.

1. **Substance Abuse**

We score the subject as positive for substance abuse if he or she answers "yes" to any question in this section. A history of substance abuse differentiates DID from schizophrenia, eating disorders, panic disorder, and controls: 51.2% of 166 DID subjects were positive.

1. **Psychiatric History**

This is a descriptive section that does not yield a score as such. In a questionnaire study (Ross, Norton, & Wozney, 1989) we found that in 236 cases of DID, the average patient had received 2.74 other psychiatric diagnoses besides DID.

1. **Major Depressive Episode**

This is scored according to DSM-IV rules, which underwent only minor changes in wording from DSM-III-R. To be positive the subject must answer "yes" to question 54. He or she must answer "yes" to 4 questions from 55-62. A history of depression does not discriminate DID from other diagnostic groups: out of 166 subjects, 89.8% had been clinically depressed at some time.

1. **Schneiderian First Rank Symptoms**

In this section we score the total number of "yes" responses. The total number of Schneiderian symptoms positive discriminates DID from all groups tested including schizophrenia. The average number of positive symptoms in 166 subjects was 6.5.

1. **Trances, Sleepwalking, Childhood Companions**

Each of these items is scored independently. The subject is positive for sleepwalking if he or she answers "yes" to question 67, positive for trances if "yes" to 69, positive for imaginary playmates
if "yes" to 71. Each of these items discriminates DID from schizophrenia, eating disorder, panic disorder, and controls.

VI. Childhood Abuse
The subject is scored positive for physical abuse if he or she answers "yes" to question 73. Other data are descriptive. A history of physical abuse discriminates DID from schizophrenia, eating disorders, and panic disorder.

The subject is positive for sexual abuse if he or she answers "yes" to question 78. Sexual abuse also discriminates DID from the other three groups. Out of 166 subjects 84.3% reported sexual abuse, 78.3% physical abuse, and 91.0% physical and/or sexual abuse.

1. Features Associated with Dissociative Identity Disorder
The responses in this section are added up to give a total score. A positive response in this section is either "yes" or else "fairly often" or "frequently," depending on the structure of the question. "Never" and "occasionally" are scored as negative. Secondary features discriminate DID from panic disorder, eating disorders and schizophrenia. The average number of features positive in 166 subjects with DID was 10.2.

1. Supernatural/Possession/ESP Experiences/Cults
In this section the positive answers are added up to give a total score. These experiences discriminate DID from the other groups. The average number of positive responses for 166 subjects was 5.3.

1. Borderline Personality Disorder
This is scored by DSM-IV rules. The subject must be positive for 5 items to meet the criteria for borderline personality. Borderline personality does not discriminate DID from other groups tested to date, except for panic disorder and controls. However, the average number of borderline criteria positive does discriminate DID from schizophrenia, eating disorders, and panic disorder. The average for 166 DID subjects was 5.1.

1. Dissociative Amnesia
This is scored by DSM-IV rules. The subject must be positive for question 117, negative for question 118, and positive for question 119.

1. Dissociative Fugue
This is scored by DSM-IV rules. The subject must be positive for questions 120 and 121, negative for 122, and positive for 123.

1. Depersonalization Disorder
This is scored by DSM-IV rules. The subject must be positive for question 124a, negative for 125, and positive for 126. Questions 124b-d are examples of depersonalization that are not required for the DSM-IV diagnosis. This diagnosis discriminates DID from other groups very poorly.

1. Dissociative Identity Disorder
This is scored by DSM-IV rules. The subject must be positive for questions 127-130 to receive a diagnosis of DID.

1. Dissociative Disorder Not Otherwise Specified
This is scored positive based on the interviewer's judgment. A patient can be positive for dissociative disorder not otherwise specified only if he or she does not have any other dissociative disorder.

1. Concluding Item
This is a descriptive question and is not scored.
Most DID patients will exhibit the DDIS profile but some will score lower than usual in some or all sections.
Individuals with dissociative disorder not otherwise specified have the same profile, but to a lesser degree than those with full DID. It is not unusual for subjects to meet criteria for both dissociative amnesia and depersonalization disorder and to have elevated symptom profiles in the
rest of the DDIS: these people usually have a chronic, complex dissociative disorder that is not well classified by the DSM-IV system. One might diagnose them as having a partial form of DID and classify them as dissociative disorder not otherwise specified, but this is not allowed by DSM-IV rules. One should bear in mind that subjects who are positive for dissociative amnesia and depersonalization disorder but negative for DID on the DDIS might actually have DID, in which case they have received a false negative diagnosis of DID from the DDIS.
APPENDIX B.4: Semi-structured Interview format for Study 3

1. General outline of how interview will proceed

Preamble

Thank you for agreeing to participate in this second part of my research into dissociation.

You have been asked to come because your scores on the dissociation scale were higher than normal, and I am interested in what it is like for people who have more episodes of dissociation than do the general population.

Consent: First, you need to read the statement and the Informed Consent forms and sign if you are comfortable in proceeding with the interview

(Sign forms)

You have the right to withdraw at any stage of the interview if the questions are distressing you, or for any other reason.

The length of this interview will be approx. 2 hours, with coffee break in the middle.

There are two parts to the interview:

- In the first hour there will be a structured interview to ask you about your medical history, psychiatric history, trauma history, and to diagnose the presence or absence of DID and other select disorders (approx. 45 minutes) (Not recorded)

- In the second hour, in a semi-structured interview, you will be asked about what dissociation is like for you (approx. 1 hour) (Recorded)

Precautions:

- During the interview, there may be questions that induce anything from mild anxiety, to mild dissociation, or even to a more severe dissociation. Some people who experience a lot of dissociation have difficulties staying present while they are talking to someone else. Is there any likelihood that an alter or alters (or different parts), will emerge to protect you at that time, or to answer the questions?

- If this were likely to happen to you today, how would you like me to handle it? If the alter/s stay/s, would they be aware that you are participating in this study?

- And would they be willing to answer the questions, or would we need to terminate the interview at that point? Who would I contact if that becomes necessary?

Reminder: the interview will be taped for transcribing purposes only. No names would be attached to the tape or any other recorded information. I will use identifying codes known only to me.

Shall we proceed?
2. DID screening questions (45 minutes) PART 1

The Dissociative Disorders Interview Schedule (DDIS) (Ross et al., 1989)
http://www.rossinst.com/dddquest.htm

3. Semi-structured questions (1 hour approx.) PART 2

Defining dissociation: You have previously filled in a questionnaire for the study "An exploration of Dissociation" containing questions about the symptoms of dissociation.

When completing the questionnaire, you indicated the following things about yourself: These were… (take from their questionnaire)

See separate sheet with their responses…

1. How would you describe what happens when you dissociate (whatever the participant calls it)? (Participant's definition of dissociation)

2. Is there more than one type of dissociation for you?

   NOTE: remember that each participant may have multiple types of dissociation, eg. Sitting in front of TV to “chill out” (absorption), the experience of standing beside themselves, or switching to an alter if triggered.

History

(Did the DID symptoms appear in childhood prior to therapy and prior to exposure to widely available knowledge concerning the expected features of DID?)

3. Can you remember your first experience of dissociation, when you first became aware that that was what was happening?

4. What was that like for you?

5. For how long have you experienced this?

6. Do you know when it started?

7. What has the pattern of dissociation been like since then (up to the present time)? (Lifeline?)

8. What is your understanding of the cause of your dissociation? Do you have reasons for why this happens to you?

Present time

(Do participants find themselves more dissociative at times of stress than in times of stability in their lives?)

Preamble: now I would like you to think of one or two recent vivid examples when you have dissociated…

…and with this at the back of your mind, could you answer the following questions:

9. How often would an "episode" happen now?
   - More than once daily?
   - Daily?
• More than once weekly?
• Weekly?
• Monthly?
• A few times per year?

10. Have you noticed that you "dissociate" (or whatever term the participant uses for this phenomenon) in some situations more than others?

11. When an episode happens, what might you be doing?

12. When an episode happens, whom might you be with? (Social triggers)
• Are you alone?
• With others? Whom?
  • Groups vs individuals?
  • Public vs private places?
  • Family vs others?

13. Are there times when it is worse than at other times? (looking for moderators)

14. Are there times when it is better than at other times?

15. What sorts of things or situations would trigger an episode of dissociation?

16. Are symptoms triggered by specific behaviours?

17. What are they?

18. What happens to you in an episode?
• Emotionally (how do you feel?)
• Behaviourally (what do you do?)
• Thoughts (what do you think?)
• Bodily sensations (What do you feel in your body?)

19. What would other people notice about you during an episode? What would they say happens to you?

20. What happens after an episode? Is that good or bad?

21. Are there times when "dissociation" helps you cope with life circumstances?

22. Are there times when it is a hindrance?

23. What would life be like if we could wave a magic wand and you didn't have these symptoms of dissociation any more?
• What would be the good about it?
• What would be the bad about it?
**Questions if the participant has been in therapy**

*(Did most individuals who were ultimately diagnosed with DID begin therapy with few or no detectable symptoms of DID and develop these features only after therapeutic intervention?)*

24. Are you still in therapy?

25. How long have you been in therapy?

26. Can you remember what your dissociative experiences were like before you began therapy?

27. What is it like now?

28. Is your understanding of dissociation different now than it was before you began therapy? How?

29. Has therapy helped you? How?

**THANK YOU**

How has the interview been for you?

I will contact you within the next 24 hours to see if you have any questions or need any assistance with finding someone to talk with further.

Would you be interested in participating in further research of a similar nature looking at daily experiences of dissociation over a two-week period?
APPENDIX C.1: SAS Scoring Program

(a) Sample SAS Scoring Program for the DES-T in General Population Samples
(Waller & Ross, 1997: Appendix)

DATA DESTScor;
INFILE Lc:/yourdir/destdaf:
INPUT id d3 d5 d7 d8 d12 d13 d22 d27;

*P = General population Base rate, Q = 1 - P;
P = .033;
Q = .967;

*Define array of threshold scores and DES-T;
Array Hitvec (22 52 38 47 45 25 85 42);
Array DEST{8} d3 d5 d7 d8 d12 d13 d22 d27;

"binary is a 0/1 selection variable;
Array binary { 8 } ;
FILE 'c:/yourdir/scratch';

Do i = 1 to 8;
   IF DEST {i} I GE Hitvec {i } then binary {i} =1;
   Else binary {i} =0;
   Put binary {i} +1;
End;
RUN;

DATA BINDAT;
INFILE 'c:/yourdir/scratch';
INPUT bl b2 b3 b4 b5 b6 b7 b8;
RUN;

DATA ALLDAT;
SET DestScor bindat;
MERGE DestScor bindat;
Array b 1 8 ] bl b2 b3 b4 b5 b6 b7 b8;
*Prob of X if taxon member;
Array Px_t(8) (.227 .475 .477 .404 .485 .387 .353 .573);
*Prob of X if nontaxon member;
Array Px_c(8J (.003 .003 .018 .004 .004 .005 .005 .010);
Array Qx_t ( 8 ) ;
Array Qx_c ( 8 );
   Do i = 1 to 8;
      Qx_t{i}=1-Px_t{i};
      Qx_c{i}=1-Px_c{i};
      End; Drop i;
   * likelihood of X given taxon (t) or nontaxon (c) member;
   lx_t=1;
   U_c=1;
   *compute likelihoods;
   Do i = 1 to 8;
      lx_t=lx_t*Px_t{i}*b{i}*Qx_t{i}**1-{i};
      lx_c=lx_c*Px_c{i}*b{i}*Qx_c{i}**1-{i};
   End;
*Pt_x are the Bayesian taxon membership probs;
Prob of taxon given X;
Pt_x=(P*dx.t)/(P*lx+t+Q*lx_c);
RUN;
All participants in Study 1 were assessed for possible taxon membership using this excel file based on the above scoring program.

<table>
<thead>
<tr>
<th>Item #</th>
<th>DES</th>
<th>DES-T</th>
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Average: 40 40

Probability of taxon given X or \( Pt_x \) 0.99181

This spreadsheet calculates a single test-taker's score on the Dissociative Experiences Scale (DES). It also calculates the Bayesian probability that the test-taker belongs in the DES Taxon. Cell E30 computes the DES score by taking the mean of all the DES item scores. Cell F30, which is labelled as the "average DES-T," is actually the sum of the scores on the eight taxon items, divided by the DES score in Cell E30. This spreadsheet was written by Darryl Perry, who specified that it is to remain in the public domain and that its source code is to be distributed for free. The calculations in this workshop are a translation of the SAS computer program that may be found in the following article: Waller, N. G., & Ross, C. A. (1997). The prevalence and biometric structure of pathological dissociation in the general population: Taxometric and behavior genetic findings. *Journal of Abnormal Psychology, 106*(4), 499-510.
APPENDIX C.2: Syntax Used for Replacing Missing Values in the CEQ

```
COMPUTE faniss = NMISS(fan1_r,fan2_r,fan3_r,fan4_r,fan5_r,fan6_r,fan7_r,fan8_r,fan9_r,fan10_r,fan11_r
,fan12_r,fan13_r,fan14_r
,fan15_r,fan16_r,fan17_r,fan18_r,fan19_r,fan20_r,fan21_r,fan22_r,fan23_r,fan24_r,fan25_r).
EXECUTE.

IF (faniss < 7) fanval = 1.
EXECUTE.

COMPUTE fatotal = SUM(fan1_r,fan2_r,fan3_r,fan4_r,fan5_r,fan6_r,fan7_r,fan8_r,fan9_r,fan10_r,fan11_r,fan12_r,fan13_r,fan14_r
,fan15_r,fan16_r,fan17_r,fan18_r,fan19_r,fan20_r,fan21_r,fan22_r,fan23_r,fan24_r,fan25_r).
EXECUTE.

COMPUTE faprop = (25 - faniss)/25.
EXECUTE

COMPUTE fapc = fatotal/faprop.
EXECUTE.

IF (fanval = 1) fantpron = fapc.
EXECUTE.
```
APPENDIX D.1: SEM Results, Summary and Discussion for the CTQ Subscales and Outcome Measures, DES and DES-T

D.1.1 Starting Model for Childhood Trauma and DES-T

Figure D.1.1. Model 0: The pathways generated from the suggested correlations and hierarchical regressions of the predictors of pathological dissociation.

Figure D.1.1 is the Model 0, for the SEM analyses pertaining to the analysis process for pathological dissociation. The starting pathways are similar to those of the starting model for the 28-item DES with the addition of the pathway between N and fantasy proneness. The precursory correlations and hierarchical multiple regression for the following SEM process can be seen in Chapter 7, section 7.6. Once again N is included rather than O because of N’s stronger correlational association with the other variables and because of the interesting way it became non-significant once fantasy proneness and resilience were added at Step 3 in the multiple regression analysis.
### D.1.2 SEM Models for the Three CTQ Subscales, Emotional Maltreatment, Physical Abuse, and Physical Neglect, for Both the DES and DES-T

The SEM analyses for each of the CTQ subscales, except for sexual abuse, as predictors of both dependent variables (DES and DES-T) are presented sequentially below.

#### D.1.2.1 Emotional maltreatment

(i) The 28-item DES: The first SEM analyses in this section examining the CTQ subscales as predictors of dissociation includes the 11-item revised emotional maltreatment subscale. The strategy of using the final model from the initial SEM process generated a poor fitting model (see the fit indices in Table D.1.1). There were three non-significant paths: (a) N to fantasy proneness; (b) emotional maltreatment to dissociation; and (c) A to dissociation. When these were addressed, Model 1 (Figure D.1.2) was a good fit. Therefore, there is no direct pathway from emotional maltreatment to dissociation in this sample, but there are two indirect pathways of note: (a) via fantasy proneness ($\beta = .19$); and (b) via N to resilience to dissociation ($\beta = .11$).

![Figure D.1.2](image)

*Figure D.1.2. Model 1: The final model for the total sample showing emotional maltreatment, personality, fantasy proneness, and resilience as predictors of dissociation.*
(ii) The 8-item DES-T: Model 0 was a poor fitting model as can be seen by the fit indices in Table D.1.1. There were two nonsignificant paths: (a) N to fantasy proneness; and (b) A to the DES-T. When these were addressed, Model 1 was a good fit (Figure D.1.3). As can be seen, unlike the above model for the 28-item DES, there is a direct pathway from emotional maltreatment to pathological dissociation. However, the pathway from fantasy proneness to dissociation remains the strongest in both models, and the indirect pathways between emotional maltreatment and pathological dissociation are the same in both models, with slightly different beta values: (a) via fantasy proneness ($\beta = .16$); and (b) via N to resilience to dissociation ($\beta = .10$).

Figure D.1.3. Model 1: The final model for the total sample showing emotional maltreatment, personality, fantasy proneness, and resilience as predictors of pathological dissociation.
Table D.1.1

Fit Indices for SEM of Emotional Maltreatment, Personality (N and A), Resilience, and Fantasy Proneness Predicting Dissociation and Pathological Dissociation.

<table>
<thead>
<tr>
<th>CTQ subscale</th>
<th>Fit Indices for DES Model</th>
<th>Fit Indices for DES-T Model</th>
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<tr>
<td></td>
<td>Model</td>
<td>Description</td>
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<td>Emotional maltreatment</td>
<td>0</td>
<td>Pathways based on final model Figure 7.3, Table 7.7</td>
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<td>Based on above model with nspaths removed</td>
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</table>

**D.1.2 Physical abuse**

(i) *The 28-item DES*: The model process for physical abuse was similar to the above model process. Model 0 was again a poor fit (Table D.1.2). There were 2 non-significant paths: (a) physical abuse to A; and (b) physical abuse to dissociation. Once these were addressed, the fit indices improved (Model 1), but modification indices indicated that the path from physical abuse to A should remain in the model. In the resulting Model 2, the pathway between A and dissociation became non-significant. When this was removed for Model 3 (Figure D.1.4), a good fit was obtained. As can be seen, physical abuse has no direct pathway to dissociation as measured by the DES. There are a number of indirect pathways from physical abuse to dissociation, but the most notable is the pathway from physical abuse to fantasy proneness to dissociation ($\beta = .11$).
Figure D.1.4. Model 3: The final model for the total sample showing physical abuse, personality, fantasy proneness, and resilience as predictors of dissociation.

(ii) The 8-item DES-T: Model 0 was not a good fit (see Table D.1.2). There was one nonsignificant path. When this was removed, the resultant model was a better fit, but overspecified. Rather than remove more pathways it was decided there was no theoretical reason to justify this, so Model 1 (Figure D.1.5) was retained as the final model. As can be seen, there is a direct pathway from physical abuse to pathological dissociation, unlike the model for the DES above. Even so, fantasy proneness remained the strongest predictor.
Figure D.1.5. Model 1: The final model for the total sample showing physical abuse, personality, fantasy proneness, and resilience as predictors of pathological dissociation.

Table D.1.2

Fit Indices for SEM of Physical Abuse, Personality (N and A), Resilience, and Fantasy Proneness Predicting Dissociation and Pathological Dissociation.

<table>
<thead>
<tr>
<th>CTQ subscale</th>
<th>Fit Indices for DES Models</th>
<th>Fit Indices for DES-T Models</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model</td>
<td>Model Description</td>
</tr>
<tr>
<td>Physical abuse</td>
<td>0</td>
<td>Pathways based on final model 2, Table 6</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Based on above model with ns paths removed</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Based on above model with MI’s addressed</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Based on above model with ns path removed</td>
</tr>
</tbody>
</table>
D 1.3 Physical neglect

(i) The 28-item DES: Finally, the model process is again as above. Model 0 was a poor fit (Table D.3) and indicated three non-significant paths: (a) physical neglect to fantasy proneness; (b) physical neglect to dissociation; and (c) A to dissociation. Once these were addressed the resultant Model 1 was a good fit (Figure D.1.6). As shown, there was no direct pathway from physical neglect to the 28-item DES, but there are a number if indirect pathways: (a) through N to resilience to dissociation ($\beta = .06$); (b) through A to fantasy proneness to dissociation ($\beta = .04$); and (c) through N to fantasy proneness to dissociation ($\beta = .03$) although the beta value is small for each. It is also noted that there is no direct pathway from physical neglect to fantasy proneness as there was for the previous two CTQ subscales.

(ii) The 8-item DES-T: Model 0 was a poor fit (Table D.1.3), and there were two nonsignificant paths: (a) A to pathological dissociation; and (b) physical neglect to fantasy proneness. When these were addressed, the resultant Model 1 (Figure D.1.7) was a better fit. Unlike the results for the 28-item DES, there was a direct pathway from physical neglect to pathological dissociation. However, fantasy proneness continued to
be a stronger predictor of both the DES and DES-T than any of the childhood abuse types.

Figure D.1.7. Model 1: The final model for the total sample showing physical neglect, personality, fantasy proneness, and resilience as predictors of pathological dissociation.

Table D.1.3

Fit Indices for SEM of Physical Neglect, Personality (N and A), Resilience, and Fantasy Proneness Predicting Dissociation and Pathological Dissociation.

<table>
<thead>
<tr>
<th>CTQ subscale</th>
<th>Model</th>
<th>Model Description</th>
<th>Fit Indices for DES Model</th>
<th>Fit Indices for DES-T Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical neglect</td>
<td>0</td>
<td>Pathways based on final model 2, Table 6</td>
<td>$\chi^2$ = 123, d.f. = 2, Sig. = .94, $\chi^2$/d.f. = .06, RMSEA = .00, SRMR = .003, CFI = 1.000, TLI = 1.039</td>
<td>$\chi^2$ = 107.1, d.f. = 5, Sig. = .06, $\chi^2$/d.f. = 2.14, RMSEA = .04, SRMR = .984, CFI = .952</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Based on above model with ns paths removed</td>
<td>$\chi^2$ = 107.1, d.f. = 5, Sig. = .06, $\chi^2$/d.f. = 2.14, RMSEA = .04, SRMR = .984, CFI = .952</td>
<td>$\chi^2$ = 107.1, d.f. = 5, Sig. = .06, $\chi^2$/d.f. = 2.14, RMSEA = .04, SRMR = .984, CFI = .952</td>
</tr>
</tbody>
</table>
Summary of results

There was no significant pathway between the three revised subscales (physical abuse, physical neglect and emotional maltreatment) and the DES, but when these revised CTQ subscales were used as predictors of pathological dissociation, all four CTQ subscales (sexual abuse, emotional maltreatment, physical abuse and physical neglect) had a direct significant pathway to pathological dissociation (8-item DES-T). It is interesting to note that, while there was a differentiation between the DES and DES-T results for three of the CTQ subscales in the SEM models, within the hierarchical regressions sexual abuse was the only CTQ subscale predictor for both the DES and DES-T. This is the rationale for not including all subscales in the body of the report.

Discussion of results

Findings supported the prediction for sexual abuse. It was the only childhood abuse subscale that predicted increased dissociativity as measured by the 28-item DES. Emotional maltreatment, physical neglect, and physical abuse were not found to have a direct pathway to dissociation. These three types of childhood abuse are indirectly related with increases in dissociativity through other pathways via variables such as fantasy proneness, neuroticism and lower resilience.

These results are inconsistent with some studies. In addition to studying sexual abuse in relation to dissociation, Chu and Dill (1990) also examined physical abuse. Contrary to the current findings, both were significant predictors of dissociation scores with physical abuse the weakest, but when combined, physical and sexual abuse together were the strongest link with high dissociation scores. However, because their sample was from a clinical population, their results regarding physical abuse may be more aligned with the results of the current study that tested the predictors of pathological dissociation (DES-T).

Other studies that found physical abuse to be a significant predictor of dissociation (Carlson, Armstrong, Loewenstein, & Roth, 1998; Foote, Smolin, Kaplan, Legatt, & Lipschitz, 2006; Kirby, Chu, & Dill, 1993) are also not consistent with findings in the current study. All three studies were conducted within clinical populations and again, all three used correlation analyses or logistic regression analyses to detect the relationship between physical abuse and dissociation. These differences in methodology could again account for the contrary findings. Furthermore, the current results do not align with those studies that found that physical abuse was more predictive
of dissociation than was sexual abuse (Mulder, Beautrais, Joyce, & Fergusson, 1998; Rhue, Lynn, & Sandberg, 1995). However, the current results align with a study by Keaney and Farley (1996) who found that physical abuse was not related to dissociation scores in an outpatient clinical sample. It is important to note that the three studies (Carlson et al.; Foote et al.; Kirby et al.) that found physical abuse to be a predictor of greater dissociativeness were conducted in clinical samples, which might account for the differing results.

Several other studies have reported on physical abuse in relation to dissociation (Akyüz, Sar, Kugu, & Dogan, 2005; Carlson et al., 2001). For example, Akyüz et al. (2005) tested for dissociativeness and prevalence of childhood trauma (childhood physical and sexual abuse, and emotional abuse, and neglect) in an epidemiological study amongst Turkish women in the general population. Using linear regression analysis, they found that participants who reported experiencing sexual abuse and physical neglect had higher DES scores. Physical abuse was not a significant predictor of dissociation. These findings are partially consistent with the current results for sexual abuse and physical abuse, but not for physical neglect.

In contrast, other research suggests that physical abuse is more associated with somatoform dissociation than it is to psychological dissociation (Waller et al., 2000), and another study found it was related to more severe PTSD symptoms than to dissociation (Carlson et al., 2001). Therefore, it seems further research is warranted to test these associations between physical abuse and different disorders that develop post trauma.

The finding that there is no direct association between emotional maltreatment and dissociation is also at odds with the results of earlier studies (Allen, Fultz, Huntoon, & Brethour, 2002; Ferguson & Dacey, 1997; Nicholls, 2002). However, the sample used by Allen et al. (\(N = 235\)) was from a clinical population who have experienced childhood maltreatment (abuse and neglect) and/or adult abuse, and 43.4% of whom were diagnosed with either DID or DDNOS. The use of a traumatised clinical population may have influenced their positive findings for emotional maltreatment. Similarly, Ferguson and Dacey used a sample of women who reported childhood emotional abuse (\(n = 55\)) to test whether they were more dissociative than a control group (\(n = 55\)), and found this to be the case. Likewise, Nicholls’ sample (\(N = 90\) adult outpatient psychotherapy clients) was also from a clinical population, and she used only correlational methods. In the current study, all childhood abuse subscales were
correlated significantly with dissociation, but the use of SEM analyses examined the relationship further. It is likely these differences in sampling technique and methodology compared to the current study produced the differing results.
REFERENCES


APPENDIX D.2: SEM analyses for the 20-item DES

D.2.1 With Total CTQ

Structural equation models were also conducted with the 20-item dissociation scale (DES20), which is purported to measure normal dissociation as opposed to the 8-item DES-T, which is thought to measure pathological dissociation. The rationale was to determine if the predictors of the DES20 were different from those of the DES. The starting model for the DES20 and its possible predictors was the final model for the DES (Figure 7.3), with the DES20 in place of the DES. This model was a poor fit (see Table D.2.1) with one non-significant pathway from the CTQ to the DES20. When this was removed the resulting model 1 was a better fit, but the pathway from N to fantasy proneness became nonsignificant. In the resulting Model 2, the pathway from A to dissociation was also nonsignificant. With the exclusion of all these nonsignificant pathways, the resulting Model 3 was the best fit for the data (see Figure D.2.1).

![Diagram of Model 3](image)

*Figure D.2.1. Model 3: The final model for the total sample showing childhood trauma, personality, fantasy proneness, and resilience as predictors of the DES20.*
Table D.2.1

*Fit Indices for the Structural Equation Model for Dependent Variable 20-item DES and Independent Variables Childhood Trauma, Personality, Fantasy Proneness, and Resilience (N = 279)*

<table>
<thead>
<tr>
<th>CTQ total scale</th>
<th>Model Description</th>
<th>$\chi^2$</th>
<th>d.f.</th>
<th>Sig.</th>
<th>$\chi^2$/df</th>
<th>RMSEA</th>
<th>SRMR</th>
<th>CFI</th>
<th>TLI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pathways based on final DES model</td>
<td>.16</td>
<td>2</td>
<td>.92</td>
<td>.08</td>
<td>.00</td>
<td>.00</td>
<td>1.00</td>
<td>1.034</td>
</tr>
<tr>
<td></td>
<td>Based on above model with ns paths removed</td>
<td>3.41</td>
<td>3</td>
<td>.33</td>
<td>1.14</td>
<td>.02</td>
<td>.02</td>
<td>.999</td>
<td>.995</td>
</tr>
<tr>
<td></td>
<td>Based on above model with ns paths removed</td>
<td>7.05</td>
<td>4</td>
<td>.13</td>
<td>1.76</td>
<td>.05</td>
<td>.03</td>
<td>.992</td>
<td>1.039</td>
</tr>
<tr>
<td></td>
<td>Based on above model with ns paths removed</td>
<td>10.60</td>
<td>5</td>
<td>.06</td>
<td>2.12</td>
<td>.06</td>
<td>.03</td>
<td>.986</td>
<td>.958</td>
</tr>
</tbody>
</table>

As can be seen, childhood abuse total scale was not a direct predictor of the DES20, however, in the following models, sexual abuse was a direct predictor of the DES20, as it was for the DES and Des-T. All other predictors of the DES20 (fantasy proneness, resilience, and N) are the same as for the DES. Therefore, the DES20 was considered similar enough to the DES to not warrant making further observations and the DES was used throughout.

**D.2.2 Sexual abuse and DES20**

The first model (Model 0) was poor fitting with a nonsignificant pathway from sexual abuse to A. When this was removed all remaining pathways were significant but the model was still not a good fit. The least significant path from A to resilience was removed as a trial. This model was a better fit, so this pathway was left out. Therefore, there was a direct significant pathway from sexual abuse to the DES20, while fantasy proneness remained the strongest predictor.
Figure D.2.2. Model 2: The final model for the total sample showing sexual abuse, personality, fantasy proneness, and resilience as predictors of the 20-item DES.

<table>
<thead>
<tr>
<th>CTQ subscale</th>
<th>Model</th>
<th>Model Description</th>
<th>χ²</th>
<th>d.f.</th>
<th>Sig.</th>
<th>χ²/df</th>
<th>RMSEA</th>
<th>SRMR</th>
<th>CFI</th>
<th>TLI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sexual abuse</td>
<td>0</td>
<td>Pathways based on final DES model, figure 7.3</td>
<td>.05</td>
<td>2</td>
<td>.98</td>
<td>.03</td>
<td>.00</td>
<td>.002</td>
<td>1.000</td>
<td>1.040</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Based on above model with ns paths removed</td>
<td>1.33</td>
<td>3</td>
<td>.72</td>
<td>.44</td>
<td>.00</td>
<td>.02</td>
<td>1.000</td>
<td>1.023</td>
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<tr>
<td></td>
<td>2</td>
<td>Based on above model with ns paths removed</td>
<td>5.82</td>
<td>4</td>
<td>.21</td>
<td>1.46</td>
<td>.04</td>
<td>.03</td>
<td>.995</td>
<td>.981</td>
</tr>
</tbody>
</table>

D.2.3 Emotional abuse and DES20

The starting model (Model 0, Figure 7.3) was not a good fit (see Table D.2.3). There were two nonsignificant paths from N to fantasy proneness and from emotional maltreatment to the DES20. These were removed, but the resultant model (Model 1) still
did not fit well. A further nonsignificant path from A to the DES20 was removed resulting in a well fitting model (Figure D.2.3). There was no direct pathway from emotional maltreatment to the DES20. The indirect pathways were the same as for the DES.

Figure D.2.3. Model 2. The final model for the total sample showing emotional maltreatment, personality, fantasy proneness, and resilience as predictors of the 20-item DES.

Table D.2.3
Fit Indices for SEM of Emotional Maltreatment, Personality (N and A), Resilience, and Fantasy Proneness Predicting the 20-item DES.

<table>
<thead>
<tr>
<th>CTQ subscale</th>
<th>Model</th>
<th>Model Description</th>
<th>Fit Indices for DES20 Models</th>
</tr>
</thead>
<tbody>
<tr>
<td>emotional maltreatment</td>
<td>0</td>
<td>Pathways based on final DES model, figure 7.3</td>
<td>( \chi^2 ) d.f. Sig. ( \chi^2/df ) RMSEA SRMR CFI TLI</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Based on above model with ns paths removed</td>
<td>3.96 4 .41 .99 .99 .00 1.000 1.000</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Based on above model with ns paths removed</td>
<td>7.71 5 .17 1.54 .04 .03 .993 .980</td>
</tr>
</tbody>
</table>
**D.2.4 Physical abuse and the DES20**

The starting model was the same as before with physical abuse as the trauma predictor (see Figure 7.3). This strategy produced a poor fitting model as shown by the fit indices (see Table D.2.4). One nonsignificant path, physical abuse to the DES20, was removed for Model 1. This model was overspecified, but all pathways were significant. To produce a better fitting model, the least significant path was removed as a trial for Model 2. This strategy produced a better fit, so this model was retained as the final Model 3. There was no direct path from physical abuse to DES20.

*Figure D.2.4. Model 2. The final model for the total sample showing physical abuse, personality, fantasy proneness, and resilience as predictors of the 20-item DES.*
Table D.2.4

**Fit Indices for SEM of Physical Abuse, Personality (N and A), Resilience, and Fantasy Proneness Predicting the 20-item DES.**

<table>
<thead>
<tr>
<th>CTQ subscale</th>
<th>Model</th>
<th>Model Description</th>
<th>χ²</th>
<th>d.f.</th>
<th>Sig.</th>
<th>χ²/df</th>
<th>RMSEA</th>
<th>SRMR</th>
<th>CFI</th>
<th>TLI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical abuse</td>
<td>0</td>
<td>Pathways based on final DES model, figure 7.3</td>
<td>.62</td>
<td>2</td>
<td>.73</td>
<td>.31</td>
<td>.00</td>
<td>.006</td>
<td>1.000</td>
<td>1.028</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Based on above model with ns paths removed</td>
<td>2.43</td>
<td>3</td>
<td>.49</td>
<td>.81</td>
<td>.00</td>
<td>.02</td>
<td>1.000</td>
<td>1.008</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Based on above model with A → DES20 removed</td>
<td>6.71</td>
<td>4</td>
<td>.15</td>
<td>1.68</td>
<td>.05</td>
<td>.02</td>
<td>.993</td>
<td>.972</td>
</tr>
</tbody>
</table>

**D.2.5 Physical neglect**

The starting model again produced a poor fitting model. There were two nonsignificant pathways: from physical neglect to fantasy proneness; and from physical neglect to DES20. When these were removed the resulting Model 1 was a good fit (see Figure D.2.5, and Table D.2.5). Again, there was no direct pathway from physical neglect to the DES20, similar to the model for the 28-item DES.

*Figure D.2.5. Model 1. The final model showing physical neglect, personality, fantasy proneness, and resilience as predictors of the 20-item DES.*
Table D.2.5

*Fit Indices for SEM of Physical Neglect, Personality (N and A), Resilience, and Fantasy Proneness Predicting the 20-item DES.*

<table>
<thead>
<tr>
<th>CTQ subscale</th>
<th>Model</th>
<th>Model Description</th>
<th>( \chi^2 )</th>
<th>d.f.</th>
<th>Sig.</th>
<th>( \chi^2/df )</th>
<th>RMSEA</th>
<th>SRMR</th>
<th>CFI</th>
<th>TLI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical neglect</td>
<td>0</td>
<td>Pathways based on final model 2, Table 6</td>
<td>.12</td>
<td>2</td>
<td>.94</td>
<td>.06</td>
<td>.00</td>
<td>.003</td>
<td>1.000</td>
<td>1.04</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Based on above model with ns paths removed</td>
<td>6.23</td>
<td>4</td>
<td>.18</td>
<td>1.56</td>
<td>.05</td>
<td>.03</td>
<td>.994</td>
<td>.976</td>
</tr>
</tbody>
</table>

**D.2.6 Summary**

The final model (Figure D.2.1) for the DES20 showed that, unlike the results for the 28-item DES, there was no direct pathway from CTQ total scale (childhood trauma) to dissociation. However, the sexual abuse subscale was a direct predictor \( (\beta = .14) \) as it was for the 28-item DES \( (\beta = .16) \). Other pathways for both scales were similar with the exception of physical neglect in which there was an added pathway from A to dissociation. Therefore, it was considered not necessary to report the results for the DES20 in full, and when dissociation is referred to, it is usually the 28-item DES unless otherwise stated.
APPENDIX D.3: Post Hoc Analyses Showing Associations between A, Fantasy Proneness, and Resilience at Item Level

D.3.1 The Association Between A, Dissociation, Fantasy Proneness, and Resilience

Little mention was made about the role of agreeableness in the SEM models even though it was a significant predictor in the multiple regressions. Correlations were carried out as post hoc analyses to explore the association between A and two other variables, dissociation and resilience. These were conducted at item level for A. In particular it was found that two A domain items belonging to the trust facet, 24 and 29, had a positive correlation with dissociation ($r(279) = 0.26, p < .001$, and $r(280) = 0.39, p < .001$ respectively). Those who were cynical about others’ intentions and/or believed that others would take advantage of them tended to be more dissociative. The same two trust facet items also had a significant correlation with resilience ($r(279) = -0.35, p < .001$ and $r(280) = -0.29, p < .001$ respectively). Those who were cynical about others’ intentions and/or believed that others would take advantage of them tended to be less resilient. In addition, all SEM models showed a negative pathway between A and fantasy proneness. Those who were less agreeable tended to be more fantasy prone.

These findings, in conjunction with the findings relating to N, highlight the fact that individuals with vulnerable temperaments are more at risk of developing dissociative disorders when exposed to adverse environments. This novel finding of an interpersonal manifestation of dissociation is consistent with the developmental trauma model, and also warrants further investigation.

D.3.2 The Association Between Resilience and Fantasy Proneness

Post hoc correlation analyses were also conducted at the item level to explore the association between the resilience scale and individual fantasy proneness items. It was found that there was a negative correlation between resilience and two fantasy proneness items: #7, “As a child, I often felt lonely” ($r(280) = -0.17, p < .01$); and #13, “I often confuse fantasies with real memories ($r(279) = -0.24, p < .001$). Those who were more lonely and who confused fantasy for reality were likely to be less resilient. However, there was a positive correlation between resilience and fantasy proneness for #16,

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1 These results, while of interest, need to be interpreted with caution because they are only correlational at the item level.
“When I recall my childhood, I have very vivid and lively memories” \( (r(278) = 0.22, p < .001) \). Those who had a more vivid and lively recall of childhood memories tended to be more resilient.

In addition, correlations between the fantasy proneness scale and resilience individual items were conducted and it was found that there was a negative association between two resilience items and fantasy proneness: #1, “When I make plans I follow through with them” \( (r(278) = -0.17, p < .01) \); and #22, “I do not dwell on things that I can’t do anything about” \( (r(278) = -0.16, p < .01) \). Those who follow through with plans they make, and who do not dwell on things they cannot do anything about, tend to be less fantasy prone.

Therefore, in exploring the association between resilience and fantasy proneness resilience may tend to be lower when participants confused fantasies and real memories, and if they often felt lonely as a child. Resilience may also be lower if they were less trusting of others. In addition, they were less fantasy prone if they did not dwell on things they could not do anything about.

However, resilience was increased if participants were able to recall their childhood with vivid and lively memories. In addition, they were less fantasy prone if they could make plans and follow through with them, and did not dwell on things they could do nothing about. This result supports the findings of Humphreys (2003), who found that battered women who made plans and followed through with them to escape the abuse were also more resilient. These findings also have clinical implications that are discussed below.
APPENDIX E.1: Sample Transcription, Study 3

1. How would you describe what happens when you dissociate?

Interviewer: What do you call it? …Now to give you an example, one lady said to me, “It’s like I go inside, back here” (back of head) and she said, “the little ones are down here” (abdomen). And other people just say it’s like blanking out, or fading out, or…do you have words for it?

James. Yeah, I do. It’s…I would say, it’s trying to find a place of peace. It’s something that I probably identify as looking for when I dissociate

I: Do you go somewhere?

J: Oh yeah. I…

I: Back in?

J: It’s really difficult to describe.

I. It’s hard for me. I’m trying to get inside your head here

J: I’m trying to describe it to you, you know… Often for me it’s like hiding internally and having bare minimal functionality on the outside, physical functionality. Does that make sense?

I. Hmm. Hmm. That’s good.

J: Yeah. Which in turn, when I do that, it causes me to stop almost working, day dream…it’s like I’ve checked out. Physically, it’s hard to do something at that time as well

I: That’s bare minimal physical activity?

J: Hmm.

I: So, is there any other way you describe it? Or is that…’cause now my next question’s going to be…

2. Is there more than one type of dissociation for you?

I. Now, I’ll explain a bit more here…

J: There’s varying degrees…

I. Yeah. So, there’s varying degrees…

J: Yeah…

I: Can you explain that?

J: I mean, the first degree could be just basically daydreaming…and depending on how stressful the situation is, or how stressed I feel, then again it’s my perception of whatever’s out there, I have changed plenty of times. R (wife) has seen me at different…first time it happened to us… who are you? [46.37] …and I was speaking in different voices to her and…that’s the other end of the scale, and…

I: So, were you, J., were you co-conscious at the time? Or were you…

J: I could see it happen. It’s like…I explained this to I. (counsellor)...it’s like I have a window at the front. Now whoever stepped…this was in the past, what used to
happen...whoever stepped up to that window, said whatever they wanted to say. I wouldn't stand back but I would see what was happening. Does that make sense?...so, it's like that. It happens to a lesser extent now because we've talked about different ways of coping with things, but yeah, that was predominantly how I operated.

I: so, you were always aware of what was happening...’causesomepeople, when they step back inside, and that person that comes forward, the one that steps back inside completely hides, and this one will come forward, and they don’t know what’s going on...

J: Depends on the severity. If I’m just sort of day dreaming, I see a lot. The further down the scale I go, the further back I am. That’s like...I feel like I’m physically further back from the front, the front being that window that I described. I can still see but I have far less control, I have less input

I: So, that one that’s at the window, would be the one that’s making your body work, doing everything else

J: Yep, talking, everything...so, it varies.

I: So how many others would there be that would step up to the window? If you know...


I: More than twenty?

J: Yep, definitely more than 20

I: ...of all ages?

J: Yep. But mostly...yes, they are all ages, was so funny, sometimes we encountered some that were...in the last couple of times (in counselling)... that were actually huge. They were big guys. But, I don’t know how old they were but there was [sic] plenty of younger ones...I counted a lot

I: How young do you reckon the younger ones would be?

J: Oh, five, six

I: Yep, like you were when it started to happen.

J. Yep. And there was a lot. It’s like, if I go inside and have a look, that’s what I can see. Does that make sense? ‘Cause I do that often.

I: Can you see them all there?

J. Ah, yeah, I do, I do. Often it's...it's not like you walk into a room and see people inside. It's a vague place. Yes, you can see it but the rules of how we perceive reality are not the same rules there. They're different...it's, oech, I can't describe it...that make sense to you, or am I confusing you?

I: No, no, I’ve done enough reading on this and interviewed enough people, that I’m kind of following

J. Okay...

I. ...and I’ve seen pictures that people have drawn of inside of them, and there’s just masses of people sometimes just all in different spots, and...

J. ...but the best way for me to describe it is that, it’s reality to me, but the rules and... even like the physics we see in this real world... are different, it’s a different place, and
it operates differently...speaking is different; sometimes there's conversation going on there that I don't know how to speak out. I don't know how to say it, but it's clear.

I. You, J., don't know how to say it?

J. That's right, I don't' know how to say it out loud, but in here it makes sense...and it's difficult to describe that, but that's common.

I: So, the voices inside, the conversations inside are between others, other than you. Or are they talking to J.?

J: Oh, all over the place, yeah

I: ...cacophonys sometimes? A cacophony of noise sometimes, or...

J: Ah, yes. Yeah. Sometimes in...especially when I'm, I suppose, more down or depressed...

I: ...they get louder?

J. Yeah. Depends what's going on in my world too...sometimes it's fairly quiet, sometimes I can actually go through times where I don't actually think about anything and it's so nice, but then other times it's just noise

I. some people have said they don't particularly want the voices to go. One of my clients said this, because she'd feel lonely.

J: That's really funny, because I actually had two guys working for me last year...I work by myself now...I often have conversations with myself, this is the way I operate, I've always done it but I do it more now because I'm by myself. But on the other hand I have always been an introvert. Now, whether that's caused by what happened to me or not I don't know...what I would have turned out like if I hadn't have, I don't know. But that sounds kinda like...but I don't like huge crowds very much.

I. You've got a crowd in here anyway

J. (laughs) That's a bit different, though, Helene. (both laugh)

I: So you’ve got varying degrees of dissociation. So you’ve got a daydreaming type, but for you it’s only a different degree of the one dissociation? Or would it be a different type?

J: It really depends on...I find it actually...I suppose, depends who steps up to the window as to what's going on...it's like, I've described this with I. (counsellor) that whoever is needed comes up. Now, there was one there that we had that was called Protector. He was like the foreman, of all of them, and he would have a lot of say. Okay? But if another situation came up where that was his job (indicating another alter), he would come up. That was his job, he would come up, okay. Then, depending on who needed...and what they were created for in the first place

I: Okay, so they were mostly male?

J: Yes, yeah, all. I haven’t encountered any females

I. Some guys do.

J. I haven’t noticed...

I. That’s all right. You’d know if they were there.

J. Yeah, I would
I: So another type of dissociation is people getting totally absorbed in something they’re doing, like watching a movie, or reading a book, or…doing something like that. Do you have that kind of dissociation?

J: Yeah, I do…sometimes if I read a book. I mean, I’ve read books in two nights, like, ’cause I don’t want to put it down. I just stay up all night and I’ve read them.

I: Do you become part of the book?

J: Almost, yeah. And it happens with films as well, I’ve noticed, and sometimes I’ll…like (wife) will want to watch a movie, or something, and I say, “I’m goin’ out” because it affects me…and I don’t want to…I almost feel part of that…and I don’t like it, especially if there’re scenes in there or something that I’m just not comfortable with

I: so, anxiety provoking…?

J: Yep, my anxiety does go up a lot and so I will just walk out…I’ll go do something else

I: Hm hmm. Much more pleasant

J: Definitely. It’s usually by myself

I. Yes. Well, I can relate to that walking out of a movie and not watching it…(husband) will watch stuff that I don’t. Why put yourself through that?

J. …it actually hurts on the inside so I’d rather not. (Wife) might watch a show that’s got…I don’t know, it might be a documentary about some guys who had…close to death experiences being out somewhere, you know, they nearly died doing this and this…it stresses me out me out, so, I don’t watch it.

I: Its not even one of those horror movie-type things?

J: No. No. Though I used to watch a lot of horror movies when I was younger…watched a lot, read a lot of books. No…

I: don’t any more?

J: No, ohh, no, no. No, no, no, no…just got rid of everything once I became a Christian…not interested in it at all after that

I: Yeah…I’m trying to think of any other type that you might experience. We’ve had the depersonalisation where you’re outside of yourself, kind of unreal feeling, is that different from the…going back inside?

J. Yes.

I. So, what’s that like?

J: I remember a couple of times…when I was a kid…I remember having this real long session of just being totally blank, wouldn’t have a clue what’s going on, and…though I still functioned physically; even though I was only a kid, probably about ten years old, but, yeah, it went on for quite a long time, probably two, maybe three weeks, it was just…and I could still…even at that time it was almost I could see myself, like…it’s almost like being in a dream, you’re trying to scream, but you can’t. Nothing comes out of your mouth, nothing. You can not make a sound, yet, you’re screaming on the inside, just nothing happens…very frustrating, but it’s not so much like you’re in a dream, but you’re awake when it happens

I: like in nightmare type stuff
J: Yeah, yeah. So that’s happened. It’s not often but it’s happened a few times
I: Hmm. Any more types you can think of?…before I move on?
J: No. I’ll probably say no. I might think of something else, I don’t know…
I: It’s very helpful though
J. Okay
I. And how are you tracking? All right?
J. Fine, yeah.

3. Can you remember your first experience of dissociation, when you first became aware that that was what was happening?

J: What? After I discovered I had it?
I. No, this could be way back in childhood, or wherever. Can you remember when you first did it and what it was like?
J. It did start about the age of 6, I can remember…
I: So you’ve memories of them
J: Yes
I: So, was this while the abuse was happening, or was it…?
J: I’d say it’d have to be after…I mean, they’re not real clear memories, but afterwards. I don’t really remember before…
I: So, you can remember going back inside, and watching at the time?
J: Yep, yep.

4. What was that like for you?

I. So, can you remember what it was like?
J. …It’s a difficult one to answer, because there’s no point of reference. As a young kid like that…again, how do you…
I: Is it kind of like running away, or is it kind of like escaping…?
J: Oh, definitely escaping, because if there’s too much pain on the outside, you go to a different place, or you retreat back in here and let someone else handle the pain, because that’s what they’re there for in the first place. That’s what it was basically like, at least you reminded me…yeah, definitely like that

5. For how long have you experienced this?

I. …so that’s…years, isn’t it? Thirty something…
J: Thirty four years

6. Do you know when it started?

I. So, you know when it started…
J: Yes
I: So, it had a definite beginning…so, age six, with the abuse?
J: Yep
I: …’cause some people have said to me as a young child even before abuse happened to them, they’d have imaginary playmates, or they’d imagine this really nice place where they’d go, ‘cause they were often socially isolated children, or whatever…so, they actually developed the ability to do it before the abuse happened to them.

J: Hmm. I remember going to kinder when I was five…this was before the abuse, and I remember not being a social butterfly even at that stage…ahh, so I don’t’ know if I was more prone to that, or whether because of my personality type, but I do remember…well even my parents would say to me sometimes then, you know, you don’t like being around people, you don’t just want to be, like…enjoy that.

I: You didn’t have imaginary playmates, you said, so…

J: No, not at all

I. did you have another place to come and go to before then?

J. It was…No, the thing is, did I need it? I don’t feel I needed it at that stage.

I: You were quite happy being you in your own little quiet way.

J. Yeah, Yeah.

I. Yep. Something else flitted through my brain and it’s gone out again. Is that dissociation? … I had another question that’s flitted through my brain…

J. Did (counsellor) catch it? (both laugh)

I. So, looking back to when dissociation started, so, has there been a distinct pattern of dissociation? Are you now different…?

7. **What has the pattern of dissociation been like since then (up to the present time)?**

J: It’s been very consistent in regards to that its been…checking out, daydreaming, a lot of that… varying scales, varying depths of that.

I: Okay, so depending what was needed

J. Yes [01.00.32]

I. so, the next question is…do you have an understanding of the cause of your dissociation?

8. **What is your understanding of the cause of your dissociation? Do you have reasons for why this happens to you?**

J: Hm hmm, Oh yeah. I believe they were created there to help me through that time when things were happening to me that were just freaking me out.

I: Yeah. So, the abuse was at the bottom of it…?

J. Ohh, definitely. You touched on some anger issues there before…I am a lot better these days, but I was very angry all the time, and for a long time

I. For a reason

J. Oh, well, I didn’t know why

I. Hm hmm. You had nowhere to put it, or what to do with it

J: I actually didn’t really acknowledge the abuse until I was older, probably a teenager?

I: Did you remember it?
J: I remembered it, but it really didn’t have much significance for me in regards that I just…it’s almost like, I put it back there…(indicates behind head)
I: You repressed it?
J. Yeah…but it…it came back at puberty, definitely, because, I mean, going from a boy to a teenager, you change and all of a sudden those…things that I experienced then, it’s like, “aa-ahhh, is that what happened?” and that’s when it all started coming back, at that point. Before that it was like…oh (shrugged)
I: Yep, didn’t like it…
J. No, but…you don’t understand, so you can’t really, you can’t put it into context and go “this is what (inaudible) is all about. You don’t know…
I: You had no reference point
J. No. no, and I certainly…My parents still don’t know to this day what happened, so, you know, I never talked to them about it. It’s not something I could have talked to them about anyway
I: too hard…
J: No, we never had that kind of family
I: Okay, not open enough…
J: No, definitely not, no.
I. It’s good that you want to talk about it to someone now
J. Oh, I can now. It was very difficult at the start, when I remember first telling (wife) about it…but…it’s a lot easier now
I: Hmm. It would have given her some understanding…
J. Yeah…I…probably…
I. …or made it worse, maybe…
J: (laughing) I think it freaked her out for a little while, especially when she saw me changing at different times…didn’t know what was going on, but she understands what’s happening to me now, and she’s quite good. She helps a lot.
I: Oh, that’s good
J. Oh yeah. She doesn’t think I’m crazy, or anything like that. She really helps.
I. did you have some...’cause some people have said their families still think they’re crazy, call them crazy, and don’t help at all
J: No
I. that’s hard isn’t it?
J. Oh yeah…you need some sort of help and then… there are certainly many days where I…I don’t think rationally, I don’t’ make decisions properly, and I often lean on wife), “Hey, help me out here, because I can’t, I don’t know what to do” and she does, she does, she helps me.
I. Hmm, good
J. I don’t know what I’d do without that
I: That’s good, yep. So, now I’m going to think about the present time, and I’d like you to think of one or two recent vivid examples when you have dissociated…with that in the back of your mind, answer the next questions…so…
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<td><strong>Good quote:</strong></td>
<td>J: I could see it happen. It’s like…I explained this to I. (counsellor)…it’s like I have a window at the front. Now whoever stepped…this was in the past, what used to happen…whoever stepped up to that window, said whatever they wanted to say. I wouldn’t stand back but I would see what was happening. Does that make</td>
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<td>Self: J can ‘see’ the change happen on the inside</td>
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<td>New ways of coping → changing personalities less often</td>
<td>Helpful therapy: developing new ways of coping other than dissociating</td>
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How many alters?
More than 20 of all ages


H. More than twenty?
J. Yep, definitely more than 20
H: ...of all ages?

Many younger alters ages 5-6 years
Therapy: ‘met’ two large male alters in therapy - not the usual type of alter – usually younger and smaller?

J: Yep. But mostly...yes, they are all ages, was so funny, sometimes we encountered some that were...in the last couple of times (in counselling)... that were actually huge. They were big guys. But, I don’t know how old they were but there was [sic] plenty of younger ones...I counted a lot

H: How young do you reckon the younger ones would be?
J: Oh, five, six
H: Yep, like you were when it started to happen.

When J goes inside to look, he can see lots of young alters
Often goes inside and looks

J. Yep. And there was a lot. It’s like, if I go inside and have a look, that’s what I can see. Does that make sense? ‘Cause I do that often.

H: Can you see them all there?

Trying to make comparisons between what the world is like inside his brain compared to the external world
External world = has rules and rooms and structure that we can see
Internal world = a vague place, no structure. Different rules from external world

J. Ah, yeah, I do, I do. Often it’s...it’s not like you walk into a room and see people inside. It’s a vague place. Yes, you can see it but the rules of how we perceive reality are not the same rules there. They’re different...it’s, ooh, I can’t describe it...that make sense to you, or am I confusing you?

H. No, no, I’ve done enough reading on this and interviewed

Plural self: number of alters – more than 20 of all ages, all male

Plural self: Many younger alters ages 5-6 years. Also
Therapy: ‘met’ two large male alters in therapy - not the usual type of alter – usually younger and smaller?

Self inspection: inner self: When J goes inside to look, he can see lots of young alters
What dissociation like? J often goes inside his mind and looks at the other alters

Plural self: can see other selves inside himself – not the same as seeing a lot of people in a room in the external world
Self: Internal world = a vague place, no structure. Different rules from external world c/f External world: has rules and rooms and structure that we can see
enough people, that I’m kind of following

J. Okay…

H. …and I’ve seen pictures that people have drawn of inside of them, and there’s just masses of people sometimes just all in different spots, and…

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Self: Inner world = reality to J, but rules and dimensions are different from external world.

Plural Self - Inner world: Conversation between alters is clear communication, but different from ‘normal’ conversation

Plural Self: communication - Can speak between alters on inside, but finds it difficult to speak out loud what he hears on the inside

| H. You, J., don’t know how to say it? |

Conversation between alters makes sense in J’s head, but no words to describe the conversation to someone in external world

| J. That’s right, I don’t know how to say it out loud, but in here it makes sense…and it’s difficult to describe that, but that’s common. |

Plural Self – inner world: Conversation between alters makes sense in J’s head, but no words to describe the conversation to someone in external world

| H: So, the voices inside, the conversations inside are between others, other than you. Or are they talking to J.? |

Lots of voices – all talking to each other and J

| J: Oh, all over the place, yeah |

Plural self: inner world: Lots of voices – all talking to each other and J - Internal noise

| H: …cacophony sometimes? A cacophony of noise sometimes, or… |

The noise is louder when J depressed or down

| J: Ah, yes. Yeah. Sometimes in…especially when I’m, I suppose, more down or depressed… |

When is it worse? The noise is louder when J depressed or down

<p>| H: …they get louder? [50.47] |</p>
<table>
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<tr>
<td>Coping: Alters appear according to who is needed at the time Alter’s names: protector</td>
<td>J: It really depends on…I find it actually…I suppose, depends who steps up to the window as to what’s going on…it’s like, I’ve described this with I. (counsellor) that whoever is needed</td>
<td><strong>Coping</strong>: Alters appear at the window according to who is needed at the time <strong>Self</strong>: Alters’ names: one is called</td>
</tr>
</tbody>
</table>
Protector’s function: foreman of all alters. Had a lot to say Each alter operates in the role/situations they were created for in the first place

H: Okay, so they were mostly male?

Gender of alters: all male

J: Yes, yeah, all. I haven’t encountered any females

H. Some guys do.

J. I haven’t noticed…

H. That’s all right. You’d know if they were there.

J. Yeah, I would

H: So another type of dissociation is people getting totally absorbed in something they’re doing, like watching a movie, or reading a book, or…doing something like that. Do you have that kind of dissociation?

Absorption: gets absorbed when reading a book or watching films

J: Yeah, I do…sometimes if I read a book. I mean, I’ve read books in two nights, like, ‘cause I don’t want to put it down. I just stay up all night and I’ve read them.

H: Do you become part of the book?

Absorption: Becomes too emotionally involved in a movie and has to leave – almost feels part of it

J: Almost, yeah. And it happens with films as well, I’ve noticed, and sometimes I’ll…like R. (wife) will want to watch a movie, or something, and I say, “I’m goin’ out” because it affects me…and I don’t want to…I almost feel part of that…and I don’t like it, especially if there’re scenes in there or something that I’m just not comfortable with

Feelings: anxiety when watching movies

H: so, anxiety provoking…?

J: Yep, my anxiety does go up a lot and so I will just walk out…I’ll go do something else

Absorption: Becomes too emotionally involved in a movie and has to leave – almost feels part of it

Feelings: anxiety when watching movies

J: I have anxiety when I watch a film, I get really involved – almost feels part of it

H: so, anxiety provoking…?

J: Yeah, I do…sometimes if I read a book. I mean, I’ve read books in two nights, like, ‘cause I don’t want to put it down. I just stay up all night and I’ve read them.

H. Some guys do.

J. I haven’t noticed…

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Coping: increasing anxiety in movies \( \rightarrow \) walk out and do

J: Yep, my anxiety does go up a lot and so I will just walk out…I’ll go do something else

Protector. Protector’s function: foreman of all alters. Had a lot to say

**Purpose of alters:** Each alter operates in the role/situations they were created for initially
<table>
<thead>
<tr>
<th>Likes lone activities</th>
<th>J: Definitely. It’s usually by myself</th>
</tr>
</thead>
</table>

**Self/relationships:** likes doing things by himself

<table>
<thead>
<tr>
<th>Movies → physical hurt on the inside → stress</th>
</tr>
</thead>
<tbody>
<tr>
<td>J: …it actually hurts on the inside so I’d rather not. R (wife) might watch a show that’s got…I don’t know, it might be a documentary about some guys who had…close to death experiences being out somewhere, you know, they nearly died doing this and this…it stresses me out me out, so, I don’t watch it.</td>
</tr>
</tbody>
</table>

**Trigger for not coping:** Movies → physical hurt on the inside → stress

<table>
<thead>
<tr>
<th>Depersonalisation/feeling unreal or outside of himself is different from going back inside</th>
</tr>
</thead>
<tbody>
<tr>
<td>J: Yes.</td>
</tr>
</tbody>
</table>

**Types:**

4. Depersonalisation/feeling unreal or outside of himself is different from going back inside

<table>
<thead>
<tr>
<th>Good quote:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Depersonalisation</strong> is like:</td>
</tr>
<tr>
<td>J: I remember a couple of times…when I was a kid…I remember having this real long session of just being totally</td>
</tr>
</tbody>
</table>

**Depersonalisation** is like:

* being totally blank;
<table>
<thead>
<tr>
<th>Feeling</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trapped?</td>
<td>Scared?</td>
</tr>
</tbody>
</table>

**First Experience of Dissociation:**

J: What? After I discovered I had it?

**History**

(Did the DID symptoms appear in childhood prior to therapy and prior to exposure to widely available knowledge concerning the expected features of DID?)
<table>
<thead>
<tr>
<th>First time he remembers going back inside – age 6 years</th>
<th>J. It did start about the age of 6, I can remember…</th>
<th>First time he remembers going back inside – age 6 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>H: So you’ve memories of then</td>
<td></td>
<td></td>
</tr>
<tr>
<td>J: yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H: So, was this while the abuse was happening, or was it…?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>First time happened after the abuse started</td>
<td>J: I’d say it’d have to be after…I mean, they’re not real clear memories, but afterwards. I don’t really remember before…</td>
<td>First time happened after the abuse started</td>
</tr>
<tr>
<td>H: So, you can remember going back inside, and watching at the time?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>J: Yep, yep.</td>
<td></td>
<td>Going back inside and watching the abuse</td>
</tr>
</tbody>
</table>

**What was that like for you?**

<table>
<thead>
<tr>
<th>Comparing child mind with adult mind. As a child, had no reference points against which to measure experience</th>
<th>J. …It’s a difficult one to answer, because there’s no point of reference. As a young kid like that…again, how do you…</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>H: Is it kind of like running away, or is it kind of like escaping…?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Going inside is like escaping from the pain  Someone else handles the pain  Alters created to handle the pain  Coping: Detachment from the pain</td>
<td>J: Oh, definitely escaping, because if there’s too much pain on the outside, you go to a different place, or you retreat back in here and let someone else handle the pain, because that’s what they’re there for in the first place. That’s what it was basically like, at least you reminded me…yeah, definitely like that</td>
<td><strong>What was it like?</strong> 1. Going inside is like escaping from the pain. Someone else handles the pain  <strong>Alters’ purpose:</strong> created to handle the pain  <strong>Coping:</strong> Detachment from the pain</td>
</tr>
</tbody>
</table>
APPENDIX F: Publications Arising out of the Project


Appendix G

G.1 Original ethics approval

Approval number for the original ethics approval for Study 2, (71/04), emailed on May 26 2004 by Bruce Findlay.

G.2 Changes to original approval

Email from Bruce Findlay (below) approving the changes to Study 3 from: asking participants to keep diaries, to: conducting interviews instead.

G.2.1 Email approving the changes

Helene,

Sorry to take so long to reply. Yes, those changes are fine. Go ahead, and all the best.

Regards, Bruce

Bruce Findlay PhD
Senior Lecturer, Psychology
Faculty of Life and Social Sciences
Swinburne University of Technology
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Hawthorne, Vic
Australia 3122

Telephone +61 3 9214 8093
Fax +61 3 9819 0574

Email bfindlay@swin.edu.au

G.3 Ethics approval from The Austin Hospital for Study 1 participants (N = 322)

Human Research Ethics Committee

Research Support Unit
North Wing
Heidelberg Repatriation Hospital

TO: Mr Tony McHugh
Post Traumatic Stress Disorder
Repat Campus
I wish to inform you that at the meeting of the Human Research Ethics Committee held on Thursday 16 June 2005, your protocol, detailed above, was fully approved for a period of three years.

It is now your responsibility to ensure that all people associated with this particular project are made aware of what has actually been approved. Any changes to the original application will require a submission of a protocol amendment to the Committee for consideration as this approval only relates to the original application as detailed above.

The Committee has requested me to make arrangement for progress reports to be submitted by the Investigator to the Committee at the end of twelve (12) months, or sooner if the project is completed within twelve (12) months. Should your study not commence twelve (12) months from the date of this letter this approval will lapse. A resubmission to the Human Research Ethics Committee would then be necessary before you could commence.

The Radiation Safety Committee must also receive a 12 monthly report if your study includes the use of ionising radiation.

The Committee wishes to be informed immediately of any untoward effects experienced by any participant in the trial where those effects in degree or nature were not anticipated by the researchers.

DETAILS OF ETHICS COMMITTEE:

It is the policy of the Committee not to release personal details of its members. However I can confirm that at the meeting at which the above project was considered, the Committee fulfilled the requirements of the National Health and Medical Research Council in that it contained men and women encompassing different age groups and included people in the following categories:

Chairperson
Lay Man
Lay Woman
Minister of Religion
Lawyer
Person with Research Experience

Additional members include:
- Nursing Administrator
- Surgeon
- Pharmacologist
- Pharmacist
I confirm that the Principal Investigator or Co-Investigators were not involved in the approval of this project. I further confirm that all relevant documentation relating to this study is kept on the premises of Austin Health for more than three years.

The Committee is organised and operates according to the *Note for Guidance on Good Clinical Practice (CPMP/ICH/135/95)*, annotated with TGA comments; and *The National Statement on Ethical Conduct in Research Involving Humans* (NHMRC The National Statement) and the applicable laws and regulations; and the Health Privacy Principles in The Health Records Act 2001. This hospital is registered under the United States DHHS Federal Wide Assurance number 00001363.

Jill Davis