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Interpersonal Needs and Values: Authenticity, Belonging, Independence and Narcissism.

Emma Aiken B S SC (Hons)
Interpersonal Needs and Values:
Authenticity, Belonging, Independence and Narcissism

Emma Aiken BSSc (Hons)

A thesis submitted in fulfilment of requirements for the Degree of Doctorate in Counselling Psychology within the School of Life and Social Sciences, Swinburne University of Technology

December 2006
DECLARATION OF ORIGINALITY

I declare that this dissertation is an account of my own research, and has not been previously submitted for a degree or diploma at any university. To the best of my knowledge and belief, this thesis contains no material written by another person except where due reference is made in the text itself. The ethical principles for research as stipulated by Swinburne University of Technology and the Australian Psychological Society have been adhered to for this research. The original data is archived and available for inspection.

Emma Aiken
December 2006
ACKNOWLEDGEMENTS

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ABSTRACT

The nature of human well-being has been debated in psychological research since the beginning of the study of human behaviour. Mechanistic perspectives regard humans to be independent objects motivated by external contingencies, with needs to be both self-sufficient and self-enhancing. Organismic perspectives describe humans as having innate self-organisational tendencies, which partly depend on qualities of relationships with others. Basic needs for well-being include being self-determined and socially integrated. Both perspectives claim empirical support. Drawing on Self-Determination Theory (SOT), the present study proposed that basic needs for well-being include autonomy and relatedness, and ego-defensive needs that undermine health include independence, control and narcissism. To compare the effects of different needs on well-being, the present study measured people’s perceived needs and the satisfaction of those needs, within the context of interpersonal interactions. Participants were sourced from the student population at a Melbourne university (N = 82), and various internet website forums (N = 171). Included were 82 participants who had received a diagnosis of social anxiety in the past two years. A new measure, the Interpersonal Needs Scale (INS) was developed to tap the strength of values for the five needs of interest, and the degree to which needs are satisfied. Factor analysis on the INS produced four value subscales: these were named Authenticity and Belonging, comprising autonomy and relatedness items, and Independence and Narcissism, both including Control items. The final version of the INS showed satisfactory reliability and validity. Results for Study 1 indicated that for the present sample, Authenticity and Belonging values were associated with overall
interpersonal need satisfaction and with well-being. Conversely, Independence and Narcissistic values were associated with dissatisfaction of interpersonal needs and compromised well-being. For Study 2, cluster analysis was used to group participants according to their INS profiles: that is, similarities in their perceived needs and their degree of satisfaction of needs. In line with predictions, the groups included: the Self-other Balanced \((N = 42)\), who reported significantly greater values for authenticity and belonging over independence and narcissism, and overall need satisfaction; the Slightly Lonely \((N = 53)\), who reported similar value ranking but some dissatisfaction of needs; the Satisfied Narcissists \((N = 45)\), who reported high values for ego-defensive needs and satisfaction of narcissistic needs only; the Needy Narcissists \((N = 81)\), who also reported high values for ego-defensive needs but high overall need dissatisfaction; and the Individualists \((N = 27)\), who reported low values for belonging and unsatisfied independence needs. The characteristics of each group were analysed and compared with each other according to a range of self-concept measures (autonomous-self, relational-self, independent-self, and narcissistic personality), indicators of psychological well-being (depression, anxiety, stress, and self-esteem), and social well-being (alienation). The Self-other Balanced group reported the highest well-being scores and a predominantly autonomous self-concept, while those who reported low values for belonging needs (Individualists), and those who reported the least satisfaction of interpersonal needs (Needy Narcissists), reported the most compromised well-being. A large proportion of respondents with social anxiety belonged to the latter group. The implications of these results for understanding the impact of values and the satisfaction of interpersonal needs on well-being were discussed.
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CHAPTER 1
ASSUMPTIONS ABOUT HUMAN NATURE AND WELL-BEING-
INDEPENDENCE AND INTERDEPENDENCE

1.1 Introduction and Overview

Theories of well-being inevitably imply assumptions about human nature and functioning. The task of understanding psychological health and well-being is linked to every major perspective in psychological science, from behaviourism to humanism, and from personality theories to social psychology. Given the diversity of approaches, it is hardly surprising that there exists a plethora of constructs thought to represent states, processes and environments indicative of or supportive of healthy functioning and happiness, and that there exists disagreement and ambiguity concerning the nature of well-being, and what is needed for well-being.

Dominant perspectives in psychology implicitly view the self as an object (McAdams, 1990), and drawing from the objectification of self, conceptualisations of well-being often focus on the state of well-being, neglecting processes that others argue are crucial to understanding well-being (Antonovsky, 1987; Maddi, 1998; Ryan, 1995; Ryan & Brown, 2003; Ryan & Frederick, 1997; Ryff, 1989). Nevertheless, researchers have been expanding the definition of well-being beyond the absence of dysfunction and the presence of positive affect for several decades (Diener, 2000; Ryff & Singer, 1996). It is currently a research area of enormous interest and diversity, and its importance is underscored by the rising incidence of psychological disorders in the population.
A central controversy in research on well-being concerns the relationship between "individualism" and well-being. One study comparing subjective well-being indices in 55 nations showed that well-being is strongly positively related to a nation's level of individualistic values ($R = .77$; Diener, Diener & Diener, 1995). Meanwhile, other researchers link individualism, in terms of a preference for independent functioning, to the rising incidence of depression, social anxiety, and suicide in Western societies, and argue for the importance of community and social support for well-being (Eckersley & Dear, 2002; Schwartz, 2000; Scott, Ciarrochi & Deane, 2004). The present study proposes that these contradictory perspectives on the relationship between individualism and well-being can be broken down by examining conceptions of human nature in terms of independence and interdependence, and associated assumptions concerning needs for healthy functioning, including whether these needs are universal or relative to subjective values and self-concept.

The present research identifies methodological two issues concerning well-being research that need to be addressed. The first is that assumptions about human nature underlying research approaches are often not made explicit, or are inadequately defined and linked to methodology. The present study uses and builds on the organismic/dialectical approach proposed by Edward Deci, Richard Ryan and their colleagues as a basis for investigating processes involved in positive functioning. Briefly, the organismic/dialectical approach considers all humans to have innate tendencies towards growth and integration of experience (Ryan, 1995). These tendencies can be nurtured or hindered by environmental factors, and are conceptualised as needs for
healthy functioning. The organismic/dialectical approach focuses on processes involved in the support of well-being, and assumes that needs for well-being are universal.

The second issue is related to the first. Making specific research assumptions about human nature and well-being explicit is important, but it is also important to step beyond one’s assumptions in order to test them. Otherwise, variables can sometimes be treated in a tautological or circular manner. For example, in Self-Determination Theory (SOT), autonomy is considered to be an innate, fundamental need for well-being, an environmental "nutriment" or requirement for positive functioning (Ryan, 1995), and an indication of well-being. Self-Determination Theory research often focuses on measuring and varying environmental support for autonomy as the process variable, while using subjective autonomy as an outcome variable. This research unambiguously shows that support for autonomy increases subjective autonomy. However, evidence that autonomy is a fundamental requirement for well-being, a central premise of SOT, cannot be established using the somewhat circular argument that support for autonomy enhances well-being by satisfying an assumed need for autonomy. Perhaps the subjective satisfaction of any perceived need enhances subjective well-being.

The present study attempts to embrace a process approach to investigating well-being and overcoming tautological limitations by exploring cognitive aspects of "need dynamics": that is, measuring various perceived needs and their satisfaction, and their relationships to conceptually distinct well-being outcome variables. These include psychological distress, self-esteem, and subjective alienation. Furthermore, the present study contrasts the implications of the organismic/dialectical perspective for well-being with those of social-cognitive perspectives, in order to find evidence for the universality
of needs for well-being versus the relative nature of needs for well-being depending on social context or predominant self-concept.

To meet these research aims, the present study considers a comparatively neglected domain in the study of human well-being: interpersonal or relational well-being. Most well-being research focuses on subjective well-being in terms of individuals' evaluations of themselves as objects (McAdams, 1990), while a process approach considers processes involved in supporting well-being (Ryan & Brown, 2003). The investigation of interpersonal and social processes involved in well-being has long been recognised as important (Baumeister & Leary, 1995) and raises many questions with important implications for well-being. These include the extent to which people "need" others for well-being, and in what way: in other words, what kinds of interpersonal needs might support or hinder well-being.

Interpersonal well-being is defined here as perceived satisfaction with various qualities of interpersonal interactions, and that this satisfaction is linked to psychological well-being. To investigate interpersonal well-being, the current research includes two studies. Study 1 involves the construction and validation of a new measure of interpersonal values and need satisfaction: the Interpersonal Needs Scale (INS), and Study 2 uses the INS to examine relationships between the valuing of and satisfaction of interpersonal needs, and various self-concept and well-being outcome variables.

Chapters 1 and 2 describe the various broad assumptions of human nature upon which well-being research is based. These include assumptions about the individuality versus interrelatedness of people, the influence of the social and cultural environment on self-concept, and the different perspectives on motivation and needs for well-being based on
these various assumptions. Chapter 3 describes Self-Determination Theory (SDT) and the organismic/dialectical theory of human nature on which it is based, and summarises SDT research findings. Building on the strengths of this approach, and recognizing its limitations, an ecological model for investigating self-concept and well-being is introduced. Chapter 4 details the aims and hypotheses of Study I: the validation of the INS measure according to relationships between INS values, need satisfaction, self-concept, and well-being. Chapter 5 describes the participants, materials and procedure for Studies I and 2, and Chapter 6 includes the results and discussion for Study 1.

Chapter 7 includes the research aims and hypotheses for Study 2: the dynamics of interpersonal needs and their relationships to self-concept and well-being, and Chapter 8 details the statistical analysis for Study 2. This analysis involves dividing the sample according to qualitatively distinct patterns of interpersonal values and need satisfaction, and describing and comparing the characteristics of these groups according to self-concept and well-being variables. Chapter 9 interprets the findings of Studies I and 2, and compares results to previous findings of SDT and social-cognitive researchers. The limitations of the present research and directions for future research are discussed. Perspectives on human nature and proposed needs for well-being based on these assumptions are presented in the sections below.

1.2 The Independent Self

The concept of the self as an independent agent acting in an external social world is the underlying and often unacknowledged assumption of self for many psychological theories and research areas (Gaertner, Sedikides, Vevea & Iuzzini, 2002; Hermans,
Kempen & van Loon, 1992). This idiocentric model of self assumes that the self is, by nature, a self-contained, independent agent, driven by internal values and motives including competitiveness, uniqueness, hedonism, and emotional distance from in-groups (Triandis & Trafimow, 2001). This view of the self as an independent entity derives from European and American beliefs about individualism, personal rights, and the personal nature of experience. It is a relatively modern phenomenon (Baumeister, 1987; 1997) and is often termed the "Western" view of self and human nature (Cross, Bacon & Morris, 2000; Hermans, Kempen & van Loon; Markus & Kitayama, 1994).

The notion of an independent self has lead to an enormous amount of empirical attention given to problems of this self. These can be summarized as concerning self-knowledge, self-definition, relation of self to others, and fulfillment of needs of the self (Baumeister, 1987). There are literally thousands of studies that give their subject matter the prefix of "self"; self-esteem, self-sufficiency, self-confidence, self-efficacy, self-worth and so on, reflecting the primacy of the idea of the independent self in psychology (Harter, 1998). Similarly, the notion of personality traits, so dominant in Western psychology, assumes there is a bounded personality that is situated within a person, is causative in shaping behaviour, and endures over time and across situations (Tice & Baumeister, 2001). Much evidence supports this view (e.g., Caspi & Roberts, 2001; McCrae & Roberts, 1994; Sedikides, 1995) and indeed, the measurement of personality and the effects of traits on behaviour relies on this assumption.

According to the independent view of self, behaviour is considered to be motivated primarily by self-serving needs or interests, such as maintenance of self-esteem (Epstein, 1973; Gaertner, Sedikides, Vevea & Iuzzini, 2002; Markus & Kitayama, 1991).
A recent meta-analysis of research supports the argument that primary motivations of the self include protecting or enhancing the individual self-definition (Gaertner et al). In terms of the self in relation to others, the independent self views the social environment as the source of satisfaction or frustration of personal needs (Markus & Kitayama). As an independent agent, the most fundamental need of the self is to differentiate itself from others, to define itself or know itself (Baumeister, 1987; Epstein). The developmental theorist Mahler (1975) considered autonomy as the goal of development, achieved by meeting separation and individuation needs, and overcoming separation anxiety. Likewise, psycho-social theorist Erikson (1968) argued that the development of an autonomous identity must first be achieved before mature intimacy with others can be attained.

So pervasive is the idea of the independent self that it could be said to underpin the social values of Western culture (Baumeister, 1987). The assumption that the needs of the healthy individual are primarily for self-sufficiency and self-worth means that raising children in a Western culture primarily involves preparing them for autonomy, individualism, self-reliance, and self-containment (Harter, 1998). Persons raised according to individualist values perceive, describe and evaluate themselves according to these values. Research has found that the majority of persons in Western cultures see themselves as predominantly independent of others. They also evaluate others as independent agents, acting according to personal self-interest (Ratner & Miller, 2001). Thus cultural values and practices reinforce and perpetuate the idea of the independent self (Markus & Kitayama, 1991).
A great deal of empirical evidence exists to support the reality of the independent self (Gaertner et al., 2002; Harter, 1998; Sedikides & Brewer, 2001). Researchers argue that needs for differentiation or individuation of self appear to be universal motives, and that much interpersonal behaviour can be explained by self-interest. Favourable comparison of self to others is a common finding in social psychology, suggesting that self-esteem is supported by (sometimes unrealistic) self-enhancement. People value personal freedom and control over their own lives. They attempt to control conditions in their own favour, and report negative responses to others’ attempts to control them. It is clear that under certain conditions at least, the notion of an independent agent acting in an external world is a valid one, and appears to fit many people’s concept of themselves.

1.3 The Independent Self and Well-being.

Conceptions of and practices for promoting and measuring well-being are based on assumptions of human nature. In Western cultures, well-being is largely understood according to the needs of the independent self. Contemporary psychotherapies are strongly influenced by assumptions about the essentially independent self; from the internal location and self-protective functions of the ego, to humanist and existentialist perspectives on needs of the self and responsibility to the self, to the cognitive-behavioural approach which explicitly locates disorders and the locus for change within the person (Hawton et al., 1989; Tarrier, Wells & Haddock, 1998). Goals common to many therapies include promoting self-awareness, self-reflection, self-direction, independent decision-making and assertiveness of one’s needs or rights.
According to the cognitive-behavioural model, disorders in functioning are often assumed to be the result of external stressors acting on the self, yet disorders are assessed, and largely treated, as though situated within the self. For example, while the popular cognitive view of depression acknowledges that depression may be precipitated and perpetuated by loss or hardship in the external world, depression is still assessed in terms of deficits in the individual’s functioning (Hawton et al). These deficits involve internally-based cognitive distortions that reduce the depressed person’s ability to cope emotionally and behaviourally. Cognitive restructuring involves training the individual to recognise and challenge his or her cognitive distortions (Fennell, 1989; Scott, 1998).

Positive outcomes for psychological interventions are often measured in terms of increased self-sufficiency, subjective happiness, and self-esteem as primary indicators of positive functioning and subjective well-being (Diener, 2000; Hubble, Duncan & Miller, 1999; Ryff & Keyes, 1995). The results of countless studies reporting positive correlations between these indices and improvements in functioning support this practice. It has been estimated that there are close to 20,000 published studies on self-esteem alone, making the construct one of the most popular in social and personality psychology (Rhodewalt & Tragakis, 2003; Tafarodi & Milne, 2002). Self-esteem is traditionally considered to result from a positive evaluation of the self; such as self-liking and self-efficacy (Brown, Collins & Schmidt, 1988; Kernis, 2003; Tafarodi & Milne), just as low self-esteem is considered to result from a global negative judgement of the self. Cognitive interventions for persons with low self-esteem are aimed at challenging negative bias in self-judgement, and replacing these with balanced and positive self-j judgements (Fennell, 1998). In the view of most researchers and the layperson alike, self-esteem simply ranges
from low to high, and the higher, the better (Rhodewalt & Tragakis). As a result of this view, recent trends have emerged in Western culture for establishing programs in educational and occupational settings for promoting self-esteem, based on encouraging people to positively evaluate themselves, in order to protect themselves against the onset of depression and other disorders.

In support of this focus on providing for the needs of the independent self, several studies have found that individualistic social values are positively associated with various well-being indices, including optimism, happiness and life satisfaction (Diener, Diener & Diener, 1995; Diener & Suh, 1999; Eckersley & Dear, 2002; Veenhoven, 1999). However, two of these studies have also found a positive correlation between individualism and suicide rates (Diener & Suh; Eckersley & Dear). It has also been suggested that individualism directly contributes to rising rates of depression in the USA (Schwartz, 2000). Even the role of high self-esteem in supporting well-being has been questioned, as an increasing number of researchers consider the negative consequences of self-enhancement motives, and differences between secure and fragile high self-esteem (Kernis, 2003, Leary, 2003; Rhodewalt & Tragakis, 2003).

1.4 The Independent Self and III-being

1.4.1 Alienation

The independent view of the self gives rise to conceptions of well-being that rely on wholeness, self-sufficiency, and positive self-regard. By implication, deficits in functioning can be considered to be caused by failure to act competently to satisfy the needs of this independent self. For example, Salvatore Maddi’s conception of “existential
hardiness” is argued to represent the individual’s capacity to make meaningful sense of experience, to meet challenges, and to be committed to making the best of one’s situation (Maddi, 1998; Maddi, Hoover & Kobasa, 1982). Researchers using a measure of hardiness, the Alienation Test, have found that hardy individuals cope better with stress compared to less hardy individuals (Kobasa, 1979; Kobasa, Maddi & Kahn, 1980), independent of other factors such as social support (Ganellen & Blaney, 1984). Hardiness has also been directly associated with a strong sense of independence (Wiebe, 1991). However, poor hardiness is not conceptualized as dependence on others, but rather as alienation; characterised by escapism, amotivation, and nihilistic, cynical attitudes towards self, relationships, family and society (Maddi, Hoover & Kobasa). According to this conception, both the healthy self and the unhealthy self are assumed to be independent, but the less healthy individual displays the flipside of the independent self: alienation. But failure to meet the needs of the "naturally" independent self is not the only explanation for the problem of alienation.

The independent self requires high self-esteem and a sense of freedom from the influence of others to function (Eckersley & Dear, 2002). Independent persons are motivated to enhance self-esteem by separating the self from others, and perceiving the self to be better than others (Myers, 1987). Paradoxically, a society composed of independent individuals is argued to perpetuate a sense of external control and defensiveness, because when the self is defined as separate and superior, there is less perceived congruence and connection with others (Eckersley & Dear). The result may be that others are perceived as the source of unwanted external forces that might threaten personal freedom and challenge superiority, reinforcing the perception that the
independent self struggles for personal control and fulfillment in a hostile, competitive world. Freedom from external control and high self-esteem are among the values and needs of the independent self, yet the individualistic society may sabotage the satisfaction of both. This argument suggests that alienation is not simply a marker of failure to meet the needs of the independent self: rather, it is a consequence of residing in a culture composed of individuals struggling to meet these needs.

This view is supported by recent Australian research suggesting that individualistic values, such as separateness and independence, may promote alienation and even contribute to increasing rates of youth suicide (Eckersley & Dear, 2002; Scott, Ciarrochi, & Deane, 2004). Research utilising the Alienation Test shows that alienation is linked broadly to psychological dysfunction, such as low self-esteem, depression, apathy, and external locus of control (Ganellen & Blaney, 1984; Maddi, 1998; Robinson, Shaver & Wrightsman, 1991), and also appears to reduce the ability to cope with life stress. Amongst highly stressed individuals, those who also report a high degree of alienation suffer more illness than those who are less alienated (Kobasa, 1979). This result was supported by a prospective study which found that while life stress increased the likelihood of illhealth, alienated individuals developed more symptoms than non-alienated individuals, even when the effects of prior illness were controlled (Kobasa, Maddi & Kahn, 1980).

1.4.2 Narcissism

On the other hand, the independent self may be largely successful in convincing itself of power and worth, by a process of comparing the self favourably to others. Others
are not identified as equals in power or in needs; they are a prop for one’s self esteem, and are exploited as such. Thus the independent self may survive in an individualistic, competitive environment by satisfying needs for self-enhancement, becoming narcissistic (Lasch, 1979). If human nature is fundamentally independent, then perhaps narcissism represents an adaptive state of being. Theorists and researchers tend to agree that narcissism is a complex and multifaceted construct. While psychoanalytic psychologists traditionally view narcissism negatively, as a disturbance in self-esteem regulation (Kemberg, 1973; Murray, 1964; Reich, 1960), Freud’s view of narcissism recognized a positive side and a negative side to narcissistic traits, and other theorists have also pointed to perhaps beneficial aspects of narcissistic traits (Cattell, 1957; Fromm, 1973). The Narcissistic Personality Inventory (NPI) developed by Raskin and Hall (1979, 1981) and modified by Raskin and Terry (1988) was designed to assess both the relatively positive, and more negative aspects of narcissism (Raskin & Terry). Based on DSM III criteria for narcissistic personality disorder, but designed to measure narcissistic traits in non-clinical population, the measure taps superiority, authority/leadership, self-sufficiency, vanity, exploitativeness, and entitlement. Research suggests that some aspects of narcissism, such as exploitativeness and entitlement, indicate greater psychopathology than do other aspects of narcissism, such as authority and self-sufficiency (Emmons, 1984; Raskin & Terry; Watson, Grisham, Trotter & Biderrnan, 1984), however most studies use the NPI as a whole.

In support of the allegedly positive aspects of narcissism, NPI total scores have been found to correlate positively with such individualistic traits as self-esteem, self-confidence, extraversion, dominance, and independence (Emmons, 1984, 1987; Raskin,
Novacek & Hogan, 1991a, Raskin & Terry, 1988; Rhodewalt & Morf, 1995), and, unsurprisingly, an independent self-definition (Gaertner et al, 2002). Furthermore, narcissism correlates negatively with self-abasement, self-ideal discrepancy, neuroticism and social anxiety (Emmons, 1984). The more positive features of narcissism, including assertiveness and self-confidence, are best captured by the self-sufficiency and authority components of the NPI (Emmons; Raskin & Terry).

On the other hand, narcissism is associated with intolerance and emotional distance from others. Indeed, those narcissists with the highest self-esteem also have the most cynical hostility and antagonism towards others (Rhodewalt & Morf, 1995). One explanation for this apparent paradox is that the narcissist's high self-esteem is dependent on constantly seeking fulfillment of self-enhancing needs in social experience (Rhodewalt & Morf; Rhodewalt & Tragakis, 2003); they feel entitled to admiration from others and dominance in relationships, and become hostile if this is not forthcoming. This negative aspect of narcissism is perhaps best captured by the Entitlement and Exploitative components of the NPI (Emmons, 1984; Raskin & Terry, 1988). Watson et al (1984) found that while the NPI as a whole correlated negatively with several measures of empathy, the entitlement/exploitative components did so most strongly, and unlike the NPI total scores, entitlement/exploitative scores correlated positively with the Narcissistic Personality Disorder Scale (Solomon, 1982; \( R = .25 \)). In contrast, the self-sufficiency/authority components correlated positively to one empathy scale \( (R = .28) \).

While there is a large body of literature exploring the defensive and manipulative interpersonal motivations of narcissists, few empirical studies to date have examined the interpersonal tactics favoured by narcissists to support their self-esteem. Exceptions
include Morf and Rhodewalt's (1995; 2001) exploration of narcissism as defensive self-regulation, whereby narcissists (as assessed by the NPI) devalue others when their own self-esteem is threatened, and prefer self-aggrandising statements to social approval-seeking in conversation (Morf, 1994). In keeping with the self-enhancement need hypothesis, Raskin and Terry (1988) found that high scorers on the NPI tended to report lower self-ideal self discrepancies, suggesting that high scorers overestimate the congruence between actual and ideal self representations. Further, narcissists' descriptions of their ideal-selves favoured anti-social characteristics; such as autocratic, aggressive, rebellious, and competitive. These results were supported by high scorers' endorsement of narcissistic and competitive interpersonal behaviours as measured by the ACL. Further, Emmons (1987) found that narcissism was associated with low intimacy but high power strivings, indicating a preference for power over others rather than establishing and maintaining reciprocal interpersonal relationships.

Together, these findings provide evidence that narcissism indicates both the valuing of, and identifying with, maladaptive social behaviours, perhaps motivated by the need to maintain ego. While this implies lack of concern for social constraints and other people's feelings and needs, at the same time narcissism indicates a constant need for others' attention and admiration for their own self-affirmation (Morf & Rhodewalt, 2001). In their attempts to prove their superiority, narcissists undermine any positive feedback from others on which not only their self-esteem but their very sense of self is ultimately reliant. From a self-regulatory point of view, their conflicting needs undermine their self-esteem, as others eventually tire of their demands and refuse to support them (Morf & Rhodewalt; Paulhus, 1998). It appears that the narcissist's means for meeting
their need for superiority is both dependent on support from others and ultimately self-defeating, such that their inflated self-esteem must walk a defensive tightrope.

On failing to secure endless positive affirmation from others, narcissists may then fall back on a further defense: self-deception. It appears that some considerable amount of self-deception may support the narcissist’s self-esteem; indeed, Paulhus (1998) found a strong relationship between the NPI and the Self-Deceptive Enhancement subscale of his Balanced Inventory of Socially Desirable Responding (BISDR), indicating overly positive self-evaluation. The same study found a moderate link between high NPI scores and the Impression Management subscale of the BISDR, suggesting that narcissists are more concerned with their regard for themselves than with what others think of them. This finding is supported by another study showing that not only do high NPI scorers engage in more self-handicapping behaviour than do low scorers when task-failure is likely, but that self-handicapping is even greater in private than in public. This suggests that narcissists actively protect and enhance their self-image using self-deception.

The narcissist appears to be more interested in maintaining self-admiration than the admiration of others, yet this disdain of others’ evaluation may be a part of the narcissist’s self-deceptive defensive armour. Clinical accounts suggest that the narcissist’s inflated self-concept masks an underlying sense of worthlessness (for a review see Akhtar & Thompson, 1982) while phenomenological evidence clearly points to dependence on others for self-esteem. In a series of daily diary studies, Rhodewalt and his colleagues (Rhodewalt, Madrian & Cheney, 1998; Rhodewalt, Tragakis & Hunh, 2001) found that narcissists reported greater daily fluctuations in their self-esteem compared to low narcissists, and that the instability of narcissists’ self-esteem was linked
to perceptions of success or failure in social interactions. Narcissists therefore deceive themselves not only concerning their superiority and high self-esteem, but also their independence from others and their contempt for other’s negative evaluations of them.

Overall, the evidence suggests that a primary motive guiding the narcissist’s social interactions is the regulation of self-esteem. Narcissists may engage in disparagement of others’ evaluation of them when their need for admiration from others is not met, in order to protect their self-esteem. Meanwhile, it is possible that cognitive repression of underlying psychological distress may be expressed behaviourally and physiologically as symptoms of stress, depression, or anxiety. However, narcissism is a highly complex construct (Raskin & Terry, 1988) and research suggests that some aspects of narcissism, such as exploitative and manipulative behaviour, indicate greater pathology than do other aspects of narcissism, such as superiority and self-sufficiency (Emmons, 1987; Raskin & Terry; Watson, Grisham, Trotter & Biderman, 1984).

1.4.3 Social anxiety

Narcissism may be a superficially successful solution to meeting the needs of individuals in Western culture (Lasch, 1979), however narcissism, with its reliance on self-deception and exploiting others to meet needs, contains the seeds of its own demise in terms of supporting self-esteem. Narcissists’ tactics of eliciting positive affirmation from others and devaluing others in order to maintain their self-esteem places them at risk of experiencing chronically unfulfilling social interactions. Unsatisfying social interactions, coupled with the coping strategies of self-deception and the repression of underlying feelings of worthlessness, may conceivably lead narcissists to defensively
project their own negative evaluations onto others. In other words, narcissists may interpret others’ failure to affirm their superiority in terms of others being excessively or unfairly critical, superior or self-centered. Indeed, narcissists’ demands on others may lead to very real negative evaluations from others.

In an attempt to maintain self-esteem, narcissists may resort to avoiding social situations in which positive affirmations may not be forthcoming. Anxiety concerning negative evaluations from others and avoidance of social situations are key elements of social anxiety (DSM-IV, American Psychological Association, 2000) one of the most prevalent and fastest growing psychological disorders in modern Western societies (Liebowitz, 1999). A third element is obsessive and negative self-focus in social situations (Wells, 1998); again it is not difficult to draw comparisons with aspects of narcissistic behaviour. While narcissists engage in positive self-focus when self-esteem is maintained, threats to self-esteem may induce anxious self-focus. Perhaps social anxiety reflects unsatisfied narcissistic needs.

It has also been speculated that social anxiety can result from failure to achieve a sense of independent self-identity, which according to Erikson’s psycho-social stages of development, is a prerequisite for achieving intimate relationships with others (Baker-Smith & Moore, 2001) Persons with social anxiety commonly report feelings of inferiority, isolation and role confusion (Baker-Smith & Moore) suggesting that they fail to achieve the standards of independent self-identity and self-sufficiency valued in individualistic society. Failure to achieve these standards has also previously been linked to alienation, with its sense of separation and isolation from others, distrust and defensiveness in social contexts, and external locus of control (Eckersley; Maddi, Hoover
Kobasa, 1982). Finally, it has been suggested that social anxiety reflects failure to meet needs not adequately recognised by the independent-self model of human nature, such as social support (Haemmerlie, Montgomery & Melchers, 1988).

An analysis of human nature and needs for positive functioning based on the concept of the independent self leads to grim conclusions: the quest to satisfy "natural" needs for self-sufficiency and self-enhancement may inevitably lead to alienation, social anxiety or narcissism. However, our analysis of human nature is far from complete. The independent-self paradigm does not acknowledge the role of social or interrelational well-being, nor can it explain deficits in functioning that appear to be caused by too much independence and over-reliance on self-sufficiency and self-enhancement; unless we accept alienation and narcissism to be "natural" states of being. An alternative explanation is that the independent self is not the fundamental or only self, and humans have needs for well-being other than those that are prefixed by "self". It seems reasonable to propose that failure to recognise or fulfill these non-self" needs may be the cause of some problems in human functioning.

1.5 The Interdependent Self

While the notion of the independent self and the focus on intrapsychic processes appears to dominate contemporary psychology (Tice & Baumeister, 2001), there are also important traditional stances in Western psychology that see the self as fundamentally social rather than independent. Early self-theorists, including James, Baldwin, Cooley and Mead, described the self as coming into being in relationship to other: existing as an awareness, reflection or comparison, rather than a pre-existing entity (Onorato & Turner.
Sullivan (1968) also emphasised interpersonal relations in the development of self (Teyber, 2000). He conceptualised the self as a set of interpersonal strategies or self-other relational patterns, designed to minimise the anxiety of rejection and maintain self-esteem. Developmental and attachment theorists such as Erikson (1968), Mahler (1975) and Ainsworth (1979) elaborated the importance of early trust relationships and the formation of secure bonds that constrain and conserve relationships. Contemporary attachment theorists (Bretherton, 1992; Sroufe, 1985) contend that the first working model of self is not an independent self but a self-other relationship.

The most fully-worked and influential theory of the relational self is probably symbolic interactionism. Symbolic interactionism posits that the sense of self is deeply entwined with our apprehension of other, in that we literally see ourselves through the eyes of the other. Self, others, and self-other relationships are represented as objects in consciousness (Hewitt, 1988; Mead, 1968). From this perspective, interdependence is conceived in terms of specific social objects with a culturally created meaning, such as holding imaginal representations of closeness in self-other interactions. Symbolic interactionism takes the view that human life is essentially a never-ending process of socialization; knowledge of self and of the world around us being dependent on the symbolic milieu that is human culture, and on its identifiable objects, including ourselves. In short, without others, there would be no self; to be human is to have the capacity to conceive self as both object and subject. This is not possible without the quality of interdependence that allows us to take the perspective of others and conceive ourselves as objects in relation to others. Interdependence is therefore a universal pre-condition for psychological functioning (Hewitt).
The interpersonal dimension of self is not limited to satisfying a need to gain self-knowledge derived from the social world; this would merely serve as a one-sided validation of self rather than interdependence (Tice & Baumeister, 2001). Indeed, merely seeking validating information about the self appears to be a relatively weak interpersonal motivation (Sedikides, 1993). Rather, human interdependence is argued to satisfy a fundamental need to belong (Baumeister & Leary, 1995; Deci & Ryan, 2002) or put another way, to avoid the distress associated with not belonging (cf Sullivan). Interdependence or interrelationship is assumed to be implicit in all human activity (Onorato & Turner, 2001). Baumeister and Leary point out that as humans have evolved in an interdependent social context in order to survive and reproduce, the need to belong has superior adaptive value compared to the need to self-enhance. Furthermore, in line with symbolic interactionists, they argue that relating to others is more than just an important motivation for the construction and maintenance of a "self"; it is largely what the self is for.

1.5.1 The interdependent self and well-being

The notion of the interdependent self implies conceptions of well-being that involve self-other relationships. Subjective well-being researchers are now recognizing that measures tapping happiness, life satisfaction and self-esteem do not do justice to interpersonal dimensions of well-being. These include positive relations with others (Ryff, 1989; Ryff & Keyes, 1995) and social support and involvement (Ogden, 2000), considered by many researchers to be vital for psychosocial health (for reviews see Barnett & Gotlib, 1988; Uchino, Cacioppo, & Kiecolt-Glaser, 1996). Social support helps
by moderating the effects of life stress on well-being (Cohen, Clark & Sherod, 1986; Ogden) and a small but growing body of research suggests that helping others is also important for well-being, providing life purpose and satisfaction (McAdams, 1990; de St Aubin & McAdams, 1995) building communal relationships (Williamson, Clark, Pergalis & Behan, 1996), and enhancing a sense of belonging.

Maintaining relationships is an important human motivation, given that people are reluctant to break relationships, often investing much effort in understanding each others' needs and supporting each other, sometimes despite any costs to their own self-interests (Baumeister & Leary, 1995). Both social cognitive and motivational researchers claim that the need to be "related" or "connected" is a fundamental, universal need for well-being (Andersen, Chen & Carter, 2000; Deci & Ryan, 2002). Reviews of well-being research suggest that the quality of interpersonal relationships is a stronger predictor of happiness compared to wealth, education, socio-economic status, and even personal achievement (Baumeister & Leary, 1995; Eckersley & Dear, 2002).

An increasing body of research also states the case for the importance of interpersonal relationships for self-esteem. Studies show that people's self-evaluations are strongly affected by their perceptions of others' evaluations of them, and that self-esteem is predicted by characteristics reflecting social acceptability such as social competence and physical appearance (Leary, 2003; Leary & Baumeister, 2000; Murray, Griffin, Rose & Bellavia, 2003). This approach to understanding self-esteem, termed "Sociometer Theory", rejects the view that self-esteem is based on private self-evaluation, and argues that people are motivated to monitor their relational value to other people in both contextual (state) and general (trait) levels. This monitoring provides
crucial feedback to the individual for ensuring appropriate social behaviours, thus supporting feelings of acceptance and worth (Leary).

In psychotherapy, much attention is given to interpersonal relationships. A large proportion of clients present with relationship and marital issues as a main source of stress, reflecting the importance of interrelational well-being to psychological functioning (Teyber, 2000). Common cognitive-based interventions involve examination of clients' interpersonal values. These consist of expectations about how they and others should be treated, including their "rights" to be heard or their "needs" for appreciation (Baucom, Sayers, & Sher, 1990; Baucom & Lester, 1986; Halford & Bouma, 1998; Schmaling, Fruzzetti, & Jacobson, 1989). Therapy may focus on examining and re-appraising perceived needs and rights, or on increasing awareness of neglected needs. Assertiveness training is a popular behavioural method for teaching a new set of interpersonal expectations in therapy: primarily those that support self-worth, equality, and having one's needs met, in order to promote healthy interpersonal functioning (Wolpe, 1990). Overall, however, the focus in cognitive-behavioural therapy is on the functioning, needs, assessment and treatment of the individual. Interpersonal problems are conceived as conflict between disparate expectations and needs of individuals.

In contrast to this conceptualisation is Sullivan's view of the interrelational self, motivated by a basic need to conserve relationships to support self-worth. This view has influenced many psychotherapists, and founders of psychotherapeutic traditions, including Erik Erikson (1968) Erich Fromm (1982), Karen Horney (1970) Frieda Fromm-Reichmann (1960) and Carl Rogers (1951). Humanistic approaches in particular emphasise clients' needs in therapy according to the fundamentally relational nature of
self, such as needs for empathy, genuineness and authenticity, and interpersonal warmth (May, 1977; Rogers, 1981). The attention to relational values in psychotherapy includes that between therapist and client. To varying degrees, all psychotherapeutic approaches acknowledge the importance of relational qualities and processes, ranging in emphasis from building and maintaining a working rapport, to the explicit focus on interrelational issues and processes in interpersonal and psychodynamic therapies (Teyber, 2000). Underlining the importance of the therapeutic relationship, a recent review of outcomes in different psychotherapies identified the qualities of this relationship as one of the most important factors in improvements in clients' functioning (Hubble, Duncan & Miller, 1999).

Despite the importance of the qualities of relationships to wellbeing, interpersonal needs for well-being remain comparatively neglected in research. Cross-cultural studies suggest that the nature of people's relating to each other is linked to the values they hold, in particular those they hold towards other people (Markus & Kitayama, 1991). It is assumed that different values, goals and motives constrain social integration and the attainment of well-being (Triandis & Gelfland, 1998). Just as values linked to individualism impact on well-being, the present study argues that values linked to interpersonal relationships and social interactions may be related to well-being. In sum, interpersonal values may guide interpersonal behaviour, by motivating people to satisfy their perceived interpersonal needs for positive functioning. To understand the relationship between needs, values and well-being, requires a closer look at the self.
2.1 The Constructed Self

The independent self, long taken for granted by western culture, is argued to be a product of western cultural assumptions (Baumeister, 1987; Hermans, Kempen & van Loon, 1992). Cross-cultural research supports this position, finding that the premise of the independent self is not assumed in non-Western cultures. Non-Western societies appear to adopt socio-centric values, wherein self-definition is embedded within social relationships (Harter, 1998; Triandis & Trafimow, 2001). The non-western self is not essentially independent of others, it only becomes a "self" in relationship to others and to social context (Harter). Self-serving motives may be replaced by other-serving or altruistic motives, as people take their primary sense of self and self-needs in terms of the social context or collective needs (Markus & Kitayama, 1991).

Social-cognitive researchers take the position that the nature of the self is neither fundamentally independent or interdependent, but varies according to cultural values. The self is constructed in terms of how people define themselves and their relationships to others, which is in turn constrained according to cultural values and expectations. The self is conceived as a cognitive structure: a relatively stable organisation of knowledge structures, or self-schemata, stored in memory and relatively accessible to consciousness (Markus, 1977; Markus & Kunda, 1986). Functionally, social-cognitive researchers define the self as "the functional unit of conscious reflection" (Markus & Kitayama,
concerned not only with one's sense of self-identity, but self-relevant values, beliefs and motives.

This definition in part reflects earlier attempts to define the self, from William James (1910) to Sullivan (1953) to Epstein (1973), as encapsulating a complex organisation of "parts" of the self, with a unifying or integrating force or function. For social cognitive researchers, this unifying force appears to include self-reflection, or self-other reflection. Research has focused on both independent and interdependent aspects of the self, and there is no consensus on the fundamental or preeminent reality of either (Sedikides & Brewer, 2001) or on their construction or permanence (Onorato & Turner, 2001). Despite differences in the exact conceptualisations of the self, researchers agree that the self-concept guides appraisal of self, the environment, and self/environment experiences such as social interactions (Epstein, Greenwald, 1980; Sampson, 1988; 1989; Triandis, 1989; Weisz, Rothbaum & Blackburn, 1984). Therefore, self-concept plays a fundamental role in interpreting experience and motivating behaviour to fulfill perceived needs, or defend against threat (Cross, Morris & Gore, 2002; Epstein, Markus & Kitayama, 1991).

In the last two decades, social psychological research on the structure and functioning of the self has explored differences in perceptions of self (e.g. self-concept, self-aspect, self-construal and self-representation) between individuals and across cultures (Sedikides & Brewer, 2001). Some researchers have pointed out that all cultures contain both predominantly independent and predominantly interdependent persons, and that most people have both independent and interdependent aspects to themselves to varying degrees (Carnevale et al 2000; Hardie, Critchley & Morris, 2006; Triandis,
however many researchers agree that one self-aspect tends to dominate over the others in the self-system (e.g., Cross, 1995; Kashima & Hardie, 2000; Markus & Kitayama, 1991; Sedikides & Brewer, 2001, Triandis).

Researchers investigating the quantity and qualities of self-representations posit several inclusive models for the self-system, including the two part model of self-aspects; independent and interdependent (Markus & Kitayama, 1991), and the tripartite model; which includes the independent or individual self, and splits the interdependent self into the relational and collective selves (Kashima & Hardie, 2000). The individual self is based on awareness of unique characteristics and is related to an independent coping style (Hardie, 2005). The collective self refers to the extent to which one identifies with social in-groups, while the relational self reflects interpersonal roles (Hardie), or the closeness and importance of individual relationships with others (e.g. sister, spouse, friend) to the self (Cross, Bacon & Morris, 2000). While allowing for the co-existence of independent and interdependent selves within a given person, these models support cross-cultural differences in self-concept. Persons from Western cultures report themselves to be predominantly independent or individualist in self-aspect, while those from non-Western cultures define themselves as predominantly collective or interdependent. These differences in self-system are argued to be due to differences in cultural beliefs and values concerning the self and its role in society (Markus & Kitayama, 1991).

In their comprehensive review of research exploring cross-cultural differences in self-representations, Markus and Kitayama (1991) present findings that closely reflect the definitions of the independent self and interdependent self described above, and support their assertion that self-concept strongly influences individual experience, including
values and motivations. Independent persons are comfortable with describing themselves with trait adjectives referring to invariant tendencies, while interdependent persons struggle to define themselves without reference to context (Cousins, 1989). With regards to emotional expression, independent persons may be more likely to express ego-focused emotions such as anger, and to attend to these emotions more intensely as an authentic expression of the inner self, than are interdependent selves. The latter may be more likely to view emotional expression as a form of social interaction and regulate themselves accordingly, de-emphasising or controlling emotions that threaten desirable social relations (Markus & Kitayama). Independent persons are motivated to enhance self-esteem by separating the self from others, and perceiving the self to be better than others (Myers, 1987). Self-enhancement motives are present even for those with high self-esteem, and result in self-serving biases (Gilovich, 1983; Lau, 1984).

Interdependent selves are motivated to work towards interdependency and restrain responses that threaten relationships (Weisz, Rothbaum & Blackburn, 1984). Interestingly, self-restraint is not necessarily seen as incompatible with independent action in a non-Western sample (Schwartz & Bilsky, 1990). Given that Interdependent persons evaluate themselves in regard to their relationships, they may support their positive view of themselves through other-enhancement or reciprocal enhancement, rather than self-enhancement (Markus & Kitayama, 1991). For example, in Japanese culture, self-enhancement is viewed negatively while modesty is valued and rewarded with social acceptance and liking.

Cross and her colleagues (Cross, Bacon & Morris, 2000; Cross, Morris & Gore, 2002) have pointed out that most research on cross-cultural differences in self-concept
has focused on the collective or group-membership aspect of the interdependent self. They suggest that in Western societies, where loyalties to groups tend to be voluntary and impermanent, interdependence is best captured by considering people’s view of themselves in relation to significant others, rather than according to group membership. They conceptualise the "relational-interdependent" self as a "global self-structure that is a source of motivation to develop close relationships with others", and propose that the relational self is defined in terms of close relationships with others (Cross, Morris & Gore, 2002; p-401). Their investigation of individuals with high scores on their interdependence measure (the Relational-Interdependent Self-Construal scale; Cross, Bacon & Morris, 2000) lead them to conclude that variation in self-construal within Western cultures could help unpack many aspects of self-other relational processes. For example, in a North American sample, they found evidence that self-reported similarity to close others, rather than superiority compared to others, may be a more powerful source of self-worth for highly interdependent persons (Cross, Morris & Gore, 2002).

2.2 Self-concept and Well-being

According to the social-cognitive perspective, the "nature" of a human being depends largely on how the social environment has shaped the self-concept. This view carries the implication that needs for healthy functioning and social integration are also culturally determined (Triandis & Gelfland, 1998). As far as people are adapted to the constraints of their culture, they can be described as "normal", "well-adjusted" and in harmony with other members of the culture (Schmitz, 1994, Ward and Chang, 1997). Another perspective in social psychology argues that, given within-culture variation in
self-concept, it is the type of self-construal rather than the culture of origin that is of importance in understanding motivations, values and goals (Cross, Bacon & Morris, 2002). Either way, the make-up of self-concept is increasingly considered to be important in understanding healthy functioning (Chirkov et al, 2003; Hardie, 2005; Hardie, Critchley & Morris, 2006; Scott, Ciarrochi, & Deane, 2004).

Two recent Australian studies investigating the links between self-concept and healthy functioning have adopted different assumptions concerning the relationship between self and social context. In the first study, congruency between self-concept and coping styles was measured to predict positive coping outcome (Hardie, 2005). Results showed that the independent self-construal was linked to self-sufficiency and independent coping behaviours, while a relational or collective self-construal was linked to valuing and seeking the support of others (Hardie). The results did not suggest that any self-construal is superior to another in terms of coping; rather the fit between self-construal, type of stressor (independent, relational, or ingroup) and coping style predicted well-being. In short, the research suggests that effective coping is dependent on a fit between self-construal and type of stressor. Interestingly, these results do not support the argument for adaptive fit between predominant self-aspect and culture, given that the more Independent persons involved in the study were no better off overall, despite their more adaptive fit with Western-style Australian cultural values of self-reliance.

The second study started with a statement that Australian culture is predominantly a Western culture, and is constrained by individualistic values (Scott, Ciarrochi, & Deane, 2004). In contrast to the argument for adaptive fit between self-construal, coping style and social context presented by the above study, the researchers posed the question;
could it be disadvantageous for well-being to be an individualist, even in an individualistic culture? Drawing on a variety of sociological and psychological researchers (e.g. Durkheim, 1951; Eckersley, 1995; Schwartz, 2000; Triandis et al, 1988), Scott and his colleagues argued that individualistic values may be linked to rising rates of depression and youth suicide in Western societies, because these values undermine social support and thereby well-being. Their results showed that individualism was associated with poor social support, deficits in emotional competence, lower intentions to seek help from others, and greater levels of hopelessness and suicidal ideation. Importantly, many relationships held when controlling for amount of social support, suggesting a causal relationship between individualistic values and compromised well-being. The results suggest that healthy functioning is not dependent on fit between values and cultural context, but that needs for well-being may not be met even for individualists within an individualistic culture.

Other researchers have pointed out that all cultures are assumed to contain both predominantly independent and predominantly interdependent persons (Triandis, Carnevale et al 2000). Given that each "type" has its adaptive advantages, it has been suggested that those people who achieve a balance between independence and interdependence in the make-up of their self-concept, or self-system, might have an advantage when it comes to coping with a variety of stressors, therefore enhancing psychological well-being (Imamoglu, 1998). Others argue that independence and interdependence are incompatible with each other (Lasch, 1978; Sampson, 1977; Smith, 1978). There are few social-cognitive researchers who have considered this problem (Brewer & Roccas, 2001), because the traditional structural cognitive model tends to
overlook the possibilities of dynamic interplay between aspects of the self (Onorato & Turner, 2001).

However, one recent study used the conceptual framework of self-complexity theory (cf. Linville, 1987) to predict that people with stronger, multiple self-aspects would also have more expansive coping styles and greater well-being (Hardie, Critchley & Morris, 2006). Using cluster analysis, the study grouped people according to strength of their individual, relational and collective self-aspects and coping styles. Results showed that people with higher scores for multiple self-aspects and coping styles reported greater well-being across a range of measures compared to those who reported lower self-aspect and coping scores. There was no difference in mean levels of stress between groups, suggesting that self-complexity in terms of strength of self-aspects has a stress-buffering effect.

2.3 The Dynamic Self-system.

The two general propositions outlined above concerning the nature of self: independent and interdependent; appear in some ways antagonistic, yet each implies the presence of the other. To varying degrees, many social cognitive theorists accept some kind of overlap or relationship between independent and interdependent aspects of self (Sedikides & Brewer, 2001). For example, despite the emphasis on consideration of others, Markus and Kitayama point out that the interdependent self is also agentic and choiceful, in that the interdependent self uses awareness of inner state, self-control, and agency to help preserve harmonious relations with others. Furthermore, Markus and Kitayama acknowledge that the awareness of experiences such as thoughts and feelings
that cannot be directly shared with others may universally lead to "some sense of an
inner, private self" (1991, p-225). Meanwhile, the independent self comes to know itself
through comparison with others (Onorato & Turner, 2001), and therefore must still relate
to others, even if only to distinguish itself (Markus & Kitayama).

Researchers are increasingly interested in the dynamics between independence
and interdependence, recognizing that both aspects of human nature are valid and in some
way co-exist (Brewer & Gardner, 1996; Guisinger and Blatt, 1993; Harter; Triandis &
Trafimow). There are several research trajectories in this field. The first, outlined above,
assumes that the self is culturally constructed. The balance of independence and
interdependence depends largely on cultural values, the transformation of self-other
experiences into memory, and the organisation of relatively stable self-schemata. A
second approach challenges the idea of the predominance of any type of self-
representation for a given person, arguing instead that different aspects of the self are
primed by contextual demands (Brewer & Gamer, 1996; Gaertner et al, 2002; Onorato &
Turner, 2001). This approach argues that the dynamics of independent and
interdependent aspects of self suggest ongoing self-constructive processes, rather than
stable self-structure (Onorato & Turner). That is, as the early theorists of the social self
proposed, the self is not a pre-existing thing, but is being constructed in the relationship
with other selves, and with the cultural and social environment (Hermans, Kempen & van
Loon, 1992; Hewitt, 1988; Mead, 1934). Similarly, some argue for a balance between
independence and interdependence needs given evidence that when needs for
differentiation, uniqueness and autonomy are being met, needs to be connected to others
may become increasingly salient (Brewer & Roccas, 2001).
Overall, the dynamics between the disparate needs of self-aspects in the self-system can be described as compensatory or complementary, rather than necessarily conflictual (Brewer & Roccas, 2001; Cross, Morris & Gore, 2002). The process of self-construction implies dynamical properties of self, such as the balancing of needs, and therefore suggest process aspects of the self, such as adaptability, development and growth. These universal aspects of human nature, deriving from a process view of self, can form a conceptual bridge between cognitive theories of self and theories of well-being (Andersen, Chen & Carter, 2000). If the make-up of the self is determined by culture and context, then the needs of the self are likewise determined by cultural values and contextual demands. On the other hand, if the self is as least partly created by universal relational processes, then some needs for well-being are somehow tied to these processes. While some values and needs concerning well-being might be heavily influenced by cultural values and self-concept, the more universal processes of self-awareness, balancing of needs, development and growth imply universal needs for well-being. Further examination of the dynamics of co-existing independence and interdependence needs, and their link to selfhood and well-being, requires research to focus on process aspects of human nature: such as motivation, self-regulation, and integration.

### 2.4 Summary for Chapters 1 and 2

The assumptions about human nature based on the individual self lead to constructs of well-being that reflect self-reliance and self-esteem. Processes underlying these constructs include independence and self-enhancement values and motives. In
contrast, the interrelated self is linked to values for fulfilling, mutually supportive relationships with others, and needs for belonging. Researchers taking the view that the self is socially or culturally constructed also recognise different classes of values or needs based on the predominant self-concept: independence needs for independent selves, and interdependence needs for related selves. This view implies that well-being is dependent in part on the "fit" between the predominant self-concept and predominant cultural values. However, the "values" of the Individual self are linked to depression, poor social support, and suicide, and perhaps also to alienation and narcissism, and social anxiety.

Social-cognitive researchers have accumulated a large body of evidence for the reality of the interdependent self, by investigating cross-cultural differences in self-concept (Markus & Kitayama, 1991; Triandis, 1987) and self-other reflective processes involved in self-definition and motivations, such as the comparison of self with others (Brewer & Gardner, 1996; Harter; Onorato & Turner, 2001) and the presence of significant others and relationships in the self-concept (Cross, Bacon & Morris, 2000). While the social cognitive approach can account for diversity in the structure of self-concept, it is limited in its ability to address process aspects of the self, such as the balancing of different needs and motives, growth, and change. It is the process aspects of self that have traditionally been argued to be universal, and may therefore speak to universal needs of the self for well-being. Empirical attention to the nature of the self has not been limited to personality or social-cognitive approaches, and it is to a process-oriented theory of self, and well-being of self, that we now turn.
CHAPTER 3

SELF-DETERMINATION AND THE ORGANISMIC PERSPECTIVE

3.1 Self-Determination Theory - an Overview

The present study argues that claims concerning what is needed for human well-being must be based on a conception of what human beings are. Few approaches to understanding well-being detail explicit assumptions concerning the nature of human beings (Ryan, 1995; Ryff, 1989). Self-Determination Theory (SOT) is one exception. Self-Determination Theory employs a process-oriented organismic-dialectical metatheory, quite different from the more mechanistic metatheories implicit in most approaches within the empirical psychological tradition (Ryan). The organismic-dialectical perspective contains the assumptions that human beings are active (rather than passive), that they are naturally inclined toward growth and development (rather than being programmed by the social environment), and that they have a set of basic needs for healthy psychological functioning. These needs are considered to be universal, rather than being determined by culture.

Based on these assumptions concerning human nature, SDT considers that all humans, regardless of cultural background, have three basic needs that must be fulfilled for healthy functioning. Basic needs are defined as "necessary conditions for psychological growth, integrity and well-being" (Deci & Ryan, 2000: pp 227). These three basic needs are postulated to be autonomy, relatedness, and competence. Respectively: people need to have opportunities to choose their actions according to their "internalised" beliefs or values, to feel related or connected to others, and to have
necessary competencies to meet challenges, in order to achieve optimal functioning. The satisfaction of these needs is argued to depend on both environmental supports, and on individual differences. These include the tendency for intrinsically motivated, self-regulated behaviour (self-determination), which in turn supports the satisfaction of salutogenic needs. Thus the relationship between the satisfaction of basic needs, and intrinsic motivation and psychological growth, is reciprocal.

The SDT model defines both the characteristics of healthy persons, and the processes of creating health. Although an essentially "bottom-up" approach that defines what is needed for healthy development, empirically the three basic needs are conceptualised as having a three-fold function in the model. Firstly, they represent underlying "nutriments", including social values, that are supplied (or derived) from the environment that support the satisfaction of basic needs, such as a cultural or contextual value for autonomous decision-making. Secondly, they describe the qualities of behaviours that support psychological growth and integration, such as engaging in autonomous decision-making. Finally, they define outcomes in terms of need satisfaction, such as autonomous self-regulation as an indication of psychological well-being. Self-Determination Theory, research findings and conclusions are now presented, as well as contrasts with other theories of needs and limitations to the model.

3.2 The Concept of Needs

Fundamentally, SDT is concerned with needs for well-being and adaptive functioning. The concept of needs derives from two very different traditions in psychology. Hull (1943) specified a set of needs linked to specific tissue deficits, such as
needs for food and water, which stimulate or "drive" the organism to satisfy them. Various behaviours linked to the satisfaction of needs (or drive reduction) become associated with drive stimulation, so that many behaviours can be explained as motivated by drive states and stimulus-response associations. In this conception, needs are innate, representing required inputs for healthy functioning. However, this approach fails to account for spontaneous and exploratory behaviours with no apparent link to drive reduction (Deci & Ryan; Pyszczynski, Greenberg & Solomon, 2000).

In contrast, Murray (1938) viewed needs as learned rather than innate. Needs, for Murray, represent any construct or "force" that organizes perception and behaviour in a certain "direction". They are acquired motive forces that pull people towards their satisfaction. Unsurprisingly, this conception lead to a plethora of "needs" for empirical investigation, the dilution of the concept of needs into one of wants or desires, and the eventual collapse of empirical research into needs (Sheldon et al, 2001). This collapse was hastened by the increasing dominance of cognitive psychology, an approach which accepts the multiplicity of motives by reframing needs as "goals" (Ryan). Furthermore, by focusing on selection, pursuit and achievement of goals, rather than their content, this approach tends to focus on goal-related efficacy. Implicit in this approach is the assumption that the satisfaction of needs means achieving one's goals, whatever they might be. Outside of SDT research, there is currently little interest in qualitatively different motives underlying goals, or their ability to support or satisfy innate needs for healthy functioning (Deci & Ryan).

Self-Determination Theory accepts that people may differ in their perceived needs, given that they value or desire different "goals" or outcomes to strive for. In
contrast to drive theories, which assume need deficits regulate behaviour in order to
directly satisfy needs, SDT states that people do not necessarily act explicitly in order to
satisfy needs for well-being. Rather, these needs are often satisfied vicariously as people
engage in activities that they value: that is, activities that they find interesting or
important (Ryan). However, the environment plays a crucial role in providing support for
salutogenic needs. These needs can be thwarted by lack of environmental support, such
as the application of external control over behaviour. In these conditions, people may
assume defensive needs such as self-protection.

Self-Determination Theory conceives basic needs in terms of what must be
provided or satisfied for positive human functioning. The theory states that these needs
and their satisfaction cannot be explained by drive-reduction, acquired motive force, or
goal-achievement theories (Ryan). Instead, drawing on the traditions of integrative and
actualising tendencies in psychology, and the current trends for investigating complex
systems in biology, SDT proposes an organismic/dialectical metatheory of human nature.
This metatheory is used to establish a framework for exploring basic needs for human
well-being.

3.3 The Organismic Paradigm

The assumptions of innate human tendencies for assimilation, integration, growth
and development of the self are shared by diverse theorists. Descriptions of these
processes include Freud’s synthetic function of the ego (1923/1962); Jung’s individuation
of the self (1951/1959); Piaget’s conception of organisational processes (1971) and the
self-actualising tendencies proposed by Maslow (1970) and Rogers (1961). To varying
degrees, these theories assume that humans not only cope with, accommodate and
respond to environmental constraints and contingencies, but actively explore, extend and learn, given the opportunities to do so. Psychotherapies developed by humanistic and existential thinkers such as Rogers, Maslow, Frankl (1951) and May (1969) place the importance of supporting these innate tendencies to move towards healthy functioning as central to therapy. These approaches are contrasted with cognitive and behavioural approaches, which focus on interventions for directing behaviour towards desired outcomes, without assuming universal qualities of well-being (Ryan, 1995).

The organismic paradigm also draws upon an increasingly popular biological perspective that argues that organisms tend towards increasing complexity and integration as a function of maintaining the integrity of the whole system (Ryan; Sole & Goodwin, 2000). While complex organisms appear to have diverse aims or goals that organise behaviour, developmentally the organisational thrust is towards self-initiated and self-directed behaviour in particular, rather than merely instinctive responses to environmental conditions (Rosenberg, 1985). According to a complex systems perspective, the whole is more than the sum of the parts. Therefore, understanding the behaviour of complex organisms includes considering regulatory and integrative processes that unify the whole. Psychologically, these unifying processes include self- and self-other reflection; supporting the construction of self-identity (Guidano, 1987), and the internalisation of social values; supporting conscious self-regulation (Ryan).

Assumptions about innate tendencies or "natural" organismic processes may obscure aspects of the motivational dynamics underlying these tendencies (Ryan, 1995; Vandenberg, 1991). Organisms cannot be understood apart from environmental conditions that have constrained their evolution and their everyday behaviours.
Organisms are "open" systems that continually engage in exchanges with their environment (Sole & Goodwin, 2000). Furthermore, as part of the evolutionary tendency towards self-regulation, organisms wield increasing abilities to affect their own environment. This propensity is most evident in humans, embedded within their self-made social, cultural and technological environment. Organisms and environment co-create each other, at the physical, social and psychological levels, in a reciprocal or dialectical relationship (Ryan; Maturana & Varela, 1992).

As self-reflective, cognitive beings, humans influence their own organisational processes through their interpretation and manipulation of their environment. These self-reflexive processes are alluded to in SOT, but their role in self-regulation and need-fulfillment are largely overlooked in SOT research (Pyszczynski, Greenberg & Solomon, 2000). Self-Determination Theory claims to emphasise the self in the process of becoming, and contrasts this perspective with the cognitive perspective of the self-as-object, such as the object of self-reflection or self-evaluation: including self-concept (Ryan & Brown, 2003).

In sum, SOT proposes that psychological development and organisation is constrained both by innate tendencies for self-regulation, and by environmental conditions that may support or hinder these tendencies. Accordingly, SOT claims to embrace a dialectical framework for the relationship between self and environment. People are neither fundamentally independent of environment, nor is behaviour seen as socially determined (Ryan, 1995). Needs for well-being are considered to be innate, linked to the nature of human beings, yet may not be realised or fulfilled if the environment is hostile to basic need satisfaction. However, this formulation is not without
problems. Self-Determination Theory tends to overlook self-reflexive processes, such as people’s beliefs and interpretations about themselves and their social environment, and how these interpretations might affect well-being.

3.4 Self-regulation

3.4.1 Intrinsric motivation

Based on the organismic-dialectical formulation of SOT, well-being for humans includes the self-regulational processes of intrinsic motivation and internalisation. Intrinsically motivated behaviour includes all behaviours that are engaged in for their own inherent satisfaction or interest, such as play and the exploration of novel objects. Over several decades of research into intrinsic motivation, Deci, Ryan and their colleagues concluded that social environments supportive of autonomous decision-making and actions over external controls or rewards increase intrinsically motivated behaviours (for a meta-analytic review, see Deci, Koestner & Ryan, 1999). They also found that supporting perceived competence, such as providing positive feedback, also encouraged these behaviours. While studies have focused predominantly on autonomy and competence supports, researchers further agree that certain qualities of relationships impact on intrinsic motivation (Ryan, 1995). This assumption is supported by Bowlby’s (1988) assertion that secure relational attachments facilitate exploration and interest in the environment. Intrinsically motivated actions represent self-regulation and self-expression, and are invariably accompanied by an internal locus of causality (Ryan). As such, they are assumed to be integral to well-being.
3.4.2 *Internalisation*

In counterbalance to self-directedness are the processes that support the internalisation of social behavioural regulations and values, and the consequent integration of the individual within the wider culture. Satisfaction of the need for relatedness is considered to facilitate these processes (Deci & Ryan, 2002; Vallerand, 2000). Secure attachment to caregivers, belonging to social groups, and receptivity to feedback from others are among the social factors that allow people to learn not only what is expected of them socially, but also to value prosocial behavioural regulation as being for the common good.

Successfully internalising social norms and values supports the perception of autonomous self-regulation as opposed to that of external control (Ryan, 1995), particularly when internalised values are congruent with basic needs for well-being (Kasser). Self-Determination theory proposes a continuum of self-regulation that takes into account the types of social constraints that impact on internalisation. External regulation includes real or perceived environmental control or coercion; introjected regulation involves the partial adoption of social constraints in order to avoid negative consequences or to maintain contingent self-esteem; and fully integrated self-regulation requires conscious, choiceful valuing of social constraints, as well as the congruence of these fully internalised values with basic needs (Deci & Ryan, 2002).

3.4.3 *Self-esteem*

Within the organismic model of the processes involved in well-being, the self is not viewed as an object or concept, rather the self is "emergent", or in a constant state of
becoming, via the processes of internalisation and self-regulation (Ryan & Brown, 2003). One important implication arising from this view is that self-esteem is not contingent on evaluation of self as an object, or indeed on others’ evaluation of self as object. Instead, self-worth emerges from processes involved in autonomous self-regulation, supported by the internalisation of need-congruent social values (Ryan & Brown).

This conceptualisation of self-esteem has similarities to sociometer theory, which posits that self-esteem is based on relational processes, including perceptions of social acceptance and responsiveness to social feedback (Leary, 2003). The common ground between the two perspectives appears to be that self-regulation based on need-congruent values, and in particular the value for and satisfaction of relatedness needs, supports self-esteem. Importantly, in contrast to assumptions regarding the well-being of the independent self described in Chapter 1, SOT argues that self-esteem is not itself a basic need, but a product of satisfied basic needs (Ryan, 1995). Indeed, according to SOT, concern with self-worth, even when self-worth is reported to be high, indicates deprivation of basic needs (Ryan & Brown, 2003).

3.5 The three basic needs

3.5.1 Autonomy

Satisfaction of needs for autonomy, relatedness and competence are argued to support well-being. Of these three needs, most attention is given conceptually and empirically to the need for autonomy. Autonomy, commonly operationalised as self-determination or acting according to one’s own choices (Deci & Ryan, 2002), is considered by some researchers to represent the core of the organismic view of human
nature as inherently self-initiated, purposive, and self-directing (Harter, 1998). Autonomy needs can be satisfied by taking opportunities to make choices and act based on one’s internalised beliefs and interests, free from external sources of control or coercion, and also free from ego-defensive responses. Perceived autonomy in educational and long-term care settings has been linked to positive self-evaluation, adaptive behaviour, achievement, life satisfaction, and self-esteem (Kasser & Ryan, 1999; Ryan & Grolnick, 1986; O’Connor & Vallerand, 1994). The Handbook of Self-Determination Theory (Deci & Ryan, 2002) contains a comprehensive review of research linking autonomy (and the other basic needs) with various indices of well-being.

Importantly, SDT makes a distinction between independence and autonomy. Some researchers (Koestner & Losier, 1996) have distinguished rebellious autonomy from self-determined autonomy by labeling the former "reactive" autonomy, and the latter "reflective" autonomy. Others have made an equivalent distinction, and labelled rebellious autonomy as individualism or independence (Chirkov et al, 2003) while a third research trajectory has made no distinction between different conceptions of autonomy, defining it as the independent self-construal (Hardie) or as individualism/idiocentrism (Scott et al, 2004) in contrast to interdependent self-construals. The present research recognises and simplifies the distinctions made by previous researchers by defining the two conceptions of autonomy as ego-defensive independence and self-determined autonomy.

Self-Determination Theory researchers argue that autonomy refers to qualities of self-regulation such as choicefulness, responsibility, and acting according to personally held values, while independence involves defensive reactions to others such as social
withdrawal, indifference to others' feelings, and rebellion against perceived control by others (Deci & Ryan, 2002, 2000; Koestner & Losier, 1996; Ryan & Lynch, 1989). This distinction is based on previous definitions of independence, such as the propensity for acting independently of others, and of social values or expectations (Gough & Heilbrun, 1983). In support of the conceptual distinction between autonomy and independence, researchers found that adolescents who rate themselves to be highly independent suffer higher levels of conflict in relationships with parents, whereas adolescents who report an autonomous self-regulatory style tend to achieve success in conflict resolution (Ryan & Lynch). The latter also perceived their parents to be more supportive and accepting. In a similar vein, another study found that, unlike autonomous students, independent students report that interactions with authority figures are frequently unpleasant (Koestner & Losier).

Based on the distinction between autonomy and independence, Ryan (1995) asserts that the implications of "organismic psychologies" for needs for well-being do not simply represent values of individualistic cultures. The distinction is echoed by Richard Eckersley (2001) who adds that in individualistic Western culture, both researchers and laypeople tend to confuse autonomy with independence. While the two constructs may overlap in some ways, such as sharing values for self-reliance and motivation for achievement (Brewer & Roccas, 2001; Deci & Ryan, 2000) other researchers have found autonomy and independence are virtually uncorrelated (Koestner & Losier, 1996). Unlike autonomy, independence is antithetical to interdependence (Hodgins, Koestner & Duncan, 1996; Scott, Ciarrochi & Deane, 2004).
Implicit in the construct of independence is the view of the self as an object, separate from and in opposition to other selves as objects (Ryan & Brown, 2003). In contrast, the concept of autonomy is argued to reflect the integration of relationships of care and support into one’s sense of self-determination. Self-determination can be considered the product of satisfied autonomy and relatedness needs, reflecting awareness of self as an agent, the originator and owner of choices, actions and feelings, and therefore socially responsible for these (Sheldon, Ryan & Reis, 1996). As a construct representing self-awareness, self-determination comes closest in SOT to capturing self-reflexivity; the reflection on self as an object, but in relation to rather than separate from other selves.

Second in empirical emphasis in SOT is the need for competence, which conceptually is similar to self-efficacy (Elliot, McGregor & Thrash; 2002). Competence is generally examined contextually, in terms of the provision of optimal challenges and feedback support in educational or occupational settings. Conceptually and empirically, the role of competence as a need for well-being is largely unambiguous and is not a focus of the current study.

3.5.2 Relatedness

Thirdly, and taking a somewhat uncertain role in self-determination theory, is the need for relatedness. Conceptually, relatedness recalls the needs and values of the relational-interdependent self (Cross, Bacon & Morris, 2000; Cross, Morris & Gore, 2002); the needs for belonging with others (Baumeister & Leary, 1995) social connectedness (Andersen, Chen & Carter, 2000); and the need
for intimacy and communion (McAdams, 1996; Bauer & McAdams, 2000). In their comprehensive review of research pertaining to this need, Baumeister and Leary focus on the importance of healthy and mutually supportive relationships for well-being, citing the effort and attention people give to relationships, and evolutionary forces as further evidence for this fundamental need. Baumeister and Leary define belonging as “a need for frequent and affectively pleasant social interactions with a few other people, and second that these interactions should take place within the context of a temporally stable and enduring framework of affective concern for each other’s welfare" (p- 498). Social cognitive researchers Andersen et al describe the need for connection as "encompassing one’s need for tenderness, warmth, emotional responsiveness and acceptance" (p-270), and in agreement with Baumeister and Leary, view this interpersonal need as the most fundamental of all needs for well-being.

Oeci and Ryan mainly recognise the need for relatedness in the context of facilitating the internalisation of social values (2002). It is thought that relatedness supports autonomy, in that being connected to others helps people internalise certain values that then become the basis for self-determined choices (Ryan, 1995). For example, adolescents who report willingness to rely on parents and teachers also report experiencing competence and autonomy in school (Ryan et al, 1994). The internalised values that are thought to support self-determination can be considered cognitive transformations of the three basic needs (Kasser, 2002). In other words, the conscious valuing of autonomy, relatedness and competence supports the fulfillment of these needs.
Overall, SOT emphasizes the role of relatedness in terms of socially construed opportunities for internalising need-congruent values, in support of autonomy. However, Ryan (1995) suggests that autonomy may also support relatedness, citing two studies that found that perceived autonomy in relationships is positively related to marital satisfaction (Blais et al., 1990; Rempel, Holmes & Zanna, 1985). Another study, contrasting autonomy with both independence and control over others as general personality styles, found that autonomy was related to positive interpersonal interactions, while independence and control were related to defensive and conflictual interactions (Hodgins, Koestner & Ouncan, 1996). A study of the well-being of nursing home residents found that the quality of relatedness to friends and family was positively correlated to autonomy support from these friends and relatives, and that both relatedness and autonomy support were positively correlated to well-being. However, this study also found a negative relationship between autonomous self-regulation and relatedness ($R = -.23$; Kasser & Ryan, 1999). No explanation was offered for this contradictory finding.

While SOT studies offer some support to the proposed complementary relationship between autonomy and relatedness, they examine the relationship between these components of well-being in terms of outcomes, or satisfied needs, rather than in terms of the needs themselves. As a result, research has not addressed possible tensions between needs for autonomy and relatedness. At times, the input of others may be at odds with the values and goals of the individual. Some researchers argue that occasional clashes between needs for autonomy and relatedness are inevitable (Pyszczynski, Greenberg & Solomon, 2000) and others take the view that autonomy and relatedness needs are simply antagonistic, and that self-determination undermines relatedness (Lasch,
It is accepted that balancing of needs within the self is a primary self-regulation task in SOT. Ryan (1995) refers to this "balancing" process as emotional integration, but gives it comparatively little consideration.

Finally, SOT research has been criticised for paying too little attention to the social nature of the self, by giving autonomy the central role in motivation and self-regulation (Andersen, Buunk & Aukje, 2000; Chen & Carter, 2000; Cross, Morris & Gore, 2002). In particular, the potential for the satisfaction of interpersonal or relatedness needs to contribute directly to well-being has been overlooked (Andersen, Chen & Carter). In social cognitive research, the effects of differences in predominant self-concept on the nature of needs and their relationship to each other has also been neglected. For example, Cross and her colleagues have suggested that for highly interdependent persons, the influence of others on personal choices and goals may not be experienced as compromising self-determination, and that overall well-being for these individuals may be dependent in part on the well-being of interpersonal relationships (Cross, Bacon & Morris, 2000; Cross, Morris & Gore, 2002). Social cognitive researchers also have presented evidence for a compensatory balance between autonomy and relatedness needs (Brewer & Roccas, 2001; Harter) and propose that support for both needs is optimal for well-being (Andersen, Chen & Carter, 2000). In sum, many questions remain about the relationship of autonomy and relatedness to each other.
3.6 Ego-defensive Needs

3.6.1 Ego-defensive needs and well-being

An important implication arises from the difference between drive theories of needs, and that proposed by SOT. Drive theories assume that lack of need satisfaction motivates individuals to satisfy needs. In contrast, SOT asserts that when psychological need satisfaction is thwarted, people may make accommodations that superficially reduce drives, but also hinder their psychological need satisfaction (Ryan, 1995). For example, when people are lonely, some aspect of the need to belong is not being satisfied. They may seek the company of others to fulfill the need for belonging. If they are not able to satisfy this need, perhaps due to real or perceived social rejection, they may develop the defense of convincing themselves that they do not need the company of others after all. This accommodation can be conceived as the ego-defensive or "substitute" need for independence from others (Ryan). This perceived need may then thwart the satisfaction of the need to belong, as feelings of loneliness are met with denial of the need for others, and increased efforts to fend for oneself. Unsurprisingly, the need to be free from others' control has also been identified as a defensive need, linked to independence as a need and as a self-concept (Hodgins, Koestner & Duncan, 1996).

Similarly, real or perceived rejection by others may lead to the defensive need to convince oneself of one's superiority compared to others (Ryan & Brown, 2003). Defensive superiority or self-worth may masquerade as high self-esteem; however, it is a fragile and unstable self-esteem, contingent on factors external to the self, such as others' approval, or on individual success (Ryan & Brown; Kernis, 2000). Easily threatened, high but fragile self-esteem is thought to require constant propping-up based on defensive
positive self-evaluation (Kernis) employing self-enhancement, self-deception, and other ego-defensive strategies (Crocker, Thompson, McGraw & Ingermane, 1987; Fitch, 1970; Tice, 1991). By measuring the stability of self-esteem over time and across varying feedback contingencies, links have been made between fragile or unstable high self-esteem and defensive, self-aggrandizing or narcissistic behaviours (Kernis, Grannemann, & Barclay, 1989; 1992); and with lower autonomy, compromised relations with others, and poorer overall well-being compared to those with stable self-esteem (Kernis & Paradise, 2002).

The distinction between fragile and secure self-esteem is increasingly supported by various researchers; challenging the traditional view that the higher self-esteem is, the better (Kernis, 2003; Rhodewalt & Tragakis, 2003; Tafarodi & Milne, 2002). More controversially, SDT argues that self-esteem is not a fundamental need at all: rather, an ongoing concern with self-worth indicates deprivation of fundamental needs (Ryan & Brown, 2003) in line with the assertion that high self-esteem represents an aggressively independent, self-enhancing or narcissistic interpersonal style (Baumeister, Tice & Hutton, 1989).

The current study proposes that defensive self-esteem regulation can be contrasted with the "sociometer" model that argues for a genuine sense of self-worth supported by responsiveness to social feedback (Leary, 2003) and further, that parallels can be drawn between this adaptive social monitoring, and the internalisation of social values that is supported by satisfaction for the need for relatedness (Ryan, 1995). Therefore, while defensive self-esteem may be related to lack of need satisfaction, perhaps secure self-esteem is supported by satisfaction of the basic needs for autonomy and relatedness.
Ryan (1995) argues that ego-defensive needs do not adequately support psychological growth and integration of experience, they interfere with basic need processes, and lead to chronic dissatisfaction of needs and psychological distress. Even when ego-defensive needs are satisfied, they may promote dysfunctional self-esteem (Ryan & Brown, 2003). In this context, psychological distress may be interpreted as failure to meet perceived needs for independence, superiority, or freedom from others' control, establishing a vicious cycle driven by unmet basic needs and perpetuated by unsatisfying substitute needs (Deci & Ryan, 2000). Perceived needs for independence and control are implicated in compromised interpersonal functioning (Hodgins, Koestner & Duncan, 1996; Koestner & Losier; Ryan & Lynch, 1989); and needs for independence are also implicated in alienation (Eckersley & Dear, 2002; Scott, Carrioche & Deane, 2004). The perceived need for superiority and self-enhancement (narcissism) is implicated in dysfunctional self-esteem regulation (Morf & Rhodewalt, 2001) and high but defensive self-esteem is in tum linked with compromised well-being (Kemis, 2000).

Lack of basic need satisfaction is generally considered to be due to lack of contextual environmental support, although it has been suggested that it may also result from failure to value basic needs, in favour of valuing substitute needs (Kasser, 2002). Indeed, some research suggests that substitute needs may be valued to some degree, even when basic needs are met (Kasser; Sheldon et al, 2001). The implications of this are intriguing, but currently unexplored. For example, one question that arises is whether valuing of substitute needs for superiority, even when basic needs are met, may be linked to dysfunctional self-esteem. In short, the vicious cycle of unsatisfying substitute needs
may be perpetuated according to values for these needs, rather than simply lack of support for basic needs.

Finally, it has been suggested that ego-defensive needs may be related to each other (Ryan, 1995) and evidence linking narcissism with perceived independence gives some support to this speculation (Gaertner et al, 2002; Rhodewalt & Morf, 1995). However, other researchers suggest that independence values are incompatible with values for interpersonal interactions (Deci & Ryan, 2002, 2000; Koestner & Losier, 1996; Ryan & Lynch, 1989) and values for interpersonal interactions may include narcissistic values for the admiration of others. Overall, ego-defensive needs, their relationship to each other and to basic needs for well-being, and the impact on well-being from the satisfaction or dissatisfaction of ego-defensive needs, have received little direct empirical investigation.

### 3.6.2 Ego-defensive needs and self-concept

Self-Determination Theory researchers assert that social context may support or thwart basic need satisfaction, and that thwarting basic need satisfaction may result in the development of substitute needs. Social cognitive theorists contend that social values constrain the formation of self-concept, and thereby perceived needs of the self for functioning. The present study accepts this premise, and speculates that self-concept may also be implicated in lack of need satisfaction. For example, if an individual’s predominant self-concept is the independent self, this may imply values for independence and self-enhancement. According to SOT, these values represent defensive needs, which by their nature are unsatisfying substitutes for basic needs. The relationship of substitute
needs to self-concept has not yet been directly investigated. The possible relationships between self-concept, perceived needs and need satisfaction are complex, and are discussed in detail in Chapters 4 and 7.

3.7 Perceptions of Needs, Need Satisfaction, and Well-being.

Most Self-Determination Theory research has focused on environmental supports for the three basic needs, and outcome in terms of satisfaction of the need for autonomy. Need satisfaction is measured as perceived autonomy in contextual self-regulation styles or in terms of global functioning, and in other indices of positive functioning (Deci & Ryan, 2000). Crucial to this methodology is the assumption that somewhere in between supports for basic needs and positive outcome, exist the needs themselves, and the process by which they are satisfied. SDT assumes that basic needs are innate rather than consciously learned (Deci & Ryan). Likewise, the process of need satisfaction is measured by outcome, rather than by perceptions of need satisfaction, because satisfaction is assumed to occur vicariously rather than consciously or deliberately (Ryan, 1995). Indeed, exploring the cognitive aspects of needs is argued to be largely irrelevant to understanding innate needs and their satisfaction (Deci & Ryan; Ryan & Brown, 2003). However, given that SDT researchers also define basic needs as requirements for healthy functioning, the additional definition of basic needs as innate or natural is at best unnecessary, and at worst misleading and empirically inaccessible. For this reason, the present study prefers the term "salutogenic" (health-creating) needs, to basic or innate needs.
Self-Determination Theory research has been criticised for tending to overlook potentially important cognitive processes involved in self-regulation and need satisfaction (Andersen, Chen & Carter, 2000; Pyszczynski, Greenberg & Solomon, 2000). Autonomous self-regulation, by definition, involves conscious internalisation of values as well as the congruence of internalised values with salutogenic needs (Kasser & Ryan, 1996; Ryan, 1995). The conceptual importance in SDT of the internalisation of need-congruent values for healthy functioning provides ample reason for studying the cognitive aspects of needs (Andersen, Chen & Carter), such as the conscious valuing of different needs, as well as the perceived importance or strength of needs and the perceived satisfaction of needs (Kasser, 2002). The idea of congruence of values with needs reflects the definition of values as "cognitive representations and transformations of needs" (Rokeach, 1973, pp 20). Values can be considered cognitive/affective tools for achieving need satisfaction, via the orientation of a person towards valued experiences or behaviours (Kasser, 2002). The strength or valency of values is also an important predictor of behaviour (Feather, 1992: 1995).

In the last decade, researchers have begun to turn their attention to some of these cognitive processes, including perceived needs and need satisfaction, and their relationship to well-being. Investigating the differences between types of values, a series of studies have distinguished between proposed intrinsic values of self-acceptance, affiliation and community feeling (reflecting salutogenic needs for autonomy and relatedness) and proposed extrinsic values, reflecting needs for individual success, physical attractiveness and fame (reflecting substitute needs for independence and superiority; Kasser & Ryan, 1996). Participants rated the importance of aspirations
representing these values, and results were subjected to higher-order factor analysis. The results revealed two clear factors: one each for intrinsic and extrinsic values, supporting the conceptual distinction between the two higher order factors. This result was obtained with participants from the USA (Kasser & Ryan), Germany (Schmuck, Kasser & Ryan, 2000), and Russia (Ryan et al, 1999) supporting the argument for universality of the distinction between intrinsic and extrinsic values.

With regards to well-being, Kasser and Ryan (1996) found that relatively high importance placed on intrinsic values is associated with greater vitality, less depression, and less narcissism, and that the reverse pattern is true for extrinsic values. Sheldon and Kasser (1995, 1998) found that compared to people whose personal goals reflected extrinsic values, people with goals reflecting intrinsic values reported greater autonomous self-regulation, positive affect, life satisfaction and self-actualisation. Measuring the perceived importance of intrinsic versus extrinsic goals, Kasser and Ryan (2001) found that the positive qualities of relationships such as trust and acceptance are positively correlated to the importance placed on intrinsic goals, and negatively related to the importance placed on extrinsic goals. This study also found that intrinsic values are linked with greater self-esteem compared to extrinsic values. Unfortunately, stability of self-esteem was not assessed.

While these studies have considered the connection between intrinsic versus extrinsic values and well-being, they have not taken into account perceptions of need satisfaction and their relationship to well-being. Only one study, to the knowledge of the current researchers, has done so. In this study, Sheldon et al (2001) requested that participants identify the most satisfying aspects of satisfying events, in order to
determine which of ten proposed needs are the most satisfying. This study revealed that satisfying events were most closely linked with perceived opportunities to experience autonomy, competence, relatedness and self-esteem, and opportunities to experience security and popularity were less strongly related to satisfying events. The results suggest that the three basic needs of SOT tend to be highly valued in comparison to other needs, because events that fulfill these needs were identified as more satisfying than those that fulfill other needs. The researchers also measured need strength in terms of individual preferences for various experiences linked to different needs. In support of the universality of basic needs for well-being, they found that events linked to satisfaction of salutogenic needs contributed most to positive outcome, regardless of need preferences. Giving further support to the universality of basic needs, there was little difference in results between an American sample and a Korean sample (representing Independent and Interdependent cultures respectively) in this study. Importantly, this study provides evidence that ego-defensive needs such as security and popularity may be valued, at least to some degree, even when salutogenic needs are satisfied, and that these ego-defensive needs are positively related to subjective satisfaction, albeit to a lesser extent compared to salutogenic needs.

3.8 Needs and Self-concept

Several social cognitive researchers state that self-concept is crucial to understanding values, perceived needs and motives (Epstein, 1973; Greenwald, 1980; Markus & Kitayama, 1991). While the internalisation of values to the self is an important concept in SOT, as a theory of universal needs for well-being SOT rejects the idea that
needs for well-being are relative to culture, values or self-concept. Ryan (1995) criticises cognitive approaches to personality, including the multiple self-aspect approach described in the previous chapter, as a "handbag" approach to the self (pp 398) bearing conceptual similarity to Murray's conception of needs. According to Ryan, this approach suggests that people acquire selves as they acquire needs. By implication, positive functioning simply depends on the fit between self-concept and context. Self-Determination Theory does not discount multiple self-aspects, or the influence of these on perceived needs (Ryan). Indeed, the internalisation of values to the self via social context is an important concept in SOT. However, SOT research has thus far neglected the study of the relationship between self-concept and needs.

Returning to the issues raised in the previous chapter, people may entertain different values and expectations for behaviour, based on their dominant self-concept, such that those with a predominantly Independent self-concept may perceive a "need" for self-reliance, while others with a predominantly Interdependent self-concept assume a "need" for mutual support. People's values and expectations, whether derived from culture (Markus & Kitayama, 1991; Triandis, 1989) or from social context (Onorato & Turner, 2001) may not be congruent with the basic needs for well-being (Chirkov et al, 2003); however few studies have directly investigated the links between independence/interdependence values and well-being. Furthermore, few social cognitive researchers recognise the distinction between autonomy and independence needs, or consider the possibility of universal needs for social integration and personal well-being (Chirkov et al; Ryan 1995). Taking into account the findings of SDT research, links
between proposed salutogenic needs and self-concept may provide new evidence for or against the universality of needs for well-being.

The present study rejects the "top-down" and relativistic cognitive perspective that self-concept informs needs for well-being, in favour of the "bottom-up" organismic perspective that values and satisfied needs contribute to growth and development, including the development of self-awareness and self-definition. It is accepted that types of perceived needs are linked to associated types of self-concept, but it is argued that only the salutogenic values of autonomy and relatedness support the development of the "healthy" self. The organismic perspective suggests that the healthy self includes both a sense of self-determination and integration with others, and following from this the present study argues that the healthy self can be partly defined and measured according to the make-up of self-concept.

3.9 Limitations to the SDT Model

While there is a growing body of research that supports the importance and universality of proposed salutogenic needs, SDT research has been hampered by a reluctance to consider cognitive aspects of needs, in favour of assuming that they are innate to human nature, and are nourished via environmental support (Andersen, Chen & Carter, 2000; Pyszczynski, Greenberg & Solomon, 2000). As a result, aspects of the model remain obscure, or inadequately tested. Problem areas include the somewhat tautological use of the concept of needs (Pyszczynski, Greenberg & Solomon), and the uncertain relationship between the need for autonomy, and the somewhat neglected need for relatedness (Andersen, Chen & Carter, 2000; Buunk & Aukje, 2000).
While the internalisation of values to the self is an important concept in SOT, there is also a lack of research concerning the link between self-concept and values, suggested by several researchers to be crucial in understanding perceived needs or motives (Epstein, 1973; Greenwald, 1980; Markus & Kitayama, 1991). As subjective perceptions of needs, values are important cognitive indications of attitudes and behaviours that may hinder or support the satisfaction of basic needs and therefore well-being (Kasser), although to date, only one study has directly investigated the links between values, need satisfaction, and well-being (Sheldon et al).

The present study proposes that a stronger argument can be made to support the claim that certain needs contribute to well-being by further investigating values: in terms of the perceptions of needs. This includes identifying which of the various proposed needs, including basic needs and substitute needs, people value; the relative strength of these valued needs; and the relationships between valued needs. The values attributed to various needs can then be compared with perceptions of the degree to which valued needs are satisfied or unsatisfied. Using the discrepancy between the strength of the value and the perception of need satisfaction, the current study introduces a further cognitive dimension of needs: the perceived lack of satisfaction of valued needs, or "neediness".

This approach has the advantages of being able to replicate previous empirical distinctions between autonomy and independence needs, and further investigate the relationship between needs for autonomy and relatedness. This approach also allows the researchers to further explore the evidence suggesting that salutogenic needs are more satisfying and contribute more to well-being, even for those who value other needs (Sheldon et al; 2001). This can be done by comparing the effects of satisfied (versus
unsatisfied) basic needs to satisfied (versus unsatisfied) substitute needs on various measures of well-being.

The present study also proposes to test the validity of the argument for the universality of needs by comparing social-cognitive theories of self in terms of their implications for needs for well-being, with those deriving from the organismic-dialectical perspective. For example, evidence that only valued and satisfied salutogenic needs (autonomy and relatedness) contribute to well-being would provide support for the universality of needs for well-being. Conversely, evidence that the relationship between needs and well-being is linked to type of self-concept (e.g. Independent, Interdependent, Autonomous and Narcissistic) would provide support for the relativity of needs for well-being. The following chapter further details the research aims of the present study.
CHAPTER 4
AIMS AND HYPOTHESES FOR STUDY 1

4.1 Overview of Chapter 4

Up to this point, the present research has detailed various assumptions of human nature and well-being, and the research findings and limitations related to social-cognitive and organismic perspectives. The present study aims to compare perspectives on needs for well-being deriving from social-cognitive theories of self, with those deriving from Self-Determination Theory. Specifically, the social-cognitive position regarding human nature and well-being is that the self is largely socially constructed, and that needs for positive functioning depend on the type of social values that constrain the self-concept (e.g. independent or interrelated) that is dominant for any given individual. Perceptions of needs should therefore reflect self-concept, with well-being affected by "fit" between perceived needs, their satisfaction, and self-concept (Hardie, 2005; Markus & Kitayama, 1991). Implied is that values for independence, narcissism, control, interdependence, and autonomy, are not pathogenic or salutogenic in themselves; their relationship to well-being simply depends on whether the perceived needs underlying these values are fulfilled. However, social cognitive researchers may be overlooking universal aspects of human experience, including needs for autonomy and relatedness suggested by organismic thinkers.

In contrast to the social cognitive perspective, SDT argues that needs for well-being are universal. Theorists challenge the notion of relative needs for well-being suggested by social cognitive researchers (Ryan, 1995), and several cross-cultural SDT studies support the assumption of universal salutogenic needs (e.g. Kasser, 2002; Sheldon...
et al, 2001). To the knowledge of the authors, no SDT research has yet explored relationships between self-concept (i.e. independent, interdependent) and needs, partly because universal needs for well-being are argued to include needs for autonomy and relatedness whether or not they are consciously or socially valued. However, some SDT researchers also suggest that conscious valuing of salutogenic needs should assist in the satisfaction of salutogenic needs and therefore well-being (Kasser & Ryan, 2001; Sheldon & Kasser, 1995). To date, SDT research has not directly tested this hypothesis, nor explored whether satisfied ego-defensive needs compromise well-being, or the impact on well-being of valued but unsatisfied salutogenic needs.

Self-Determination Theory researchers, drawing on the organismic model, argue that salutogenic needs are innate to human nature, yet they also describe them as being environmental nutriments for growth and well-being. While environmental nutriments or supports can be experimentally manipulated, the conceptualisation of well-being in SDT assumes the existence and satisfaction of innate needs for well-being. Much empirical research seems bound by this somewhat tautological model. While the relationship between perceived needs (conceived as goals) and need satisfaction has been investigated, research has yet to distinguish clearly between needs in terms of the subjective value of needs and in terms of the satisfaction of needs, and has also yet to explore the relationships between valued needs themselves, and the relationships between valued needs and need satisfaction. Transforming the concept of innate needs or environmental nutriments into subjective cognitive variables; ie needs that are explicitly acknowledged as values, could shed much light on need dynamics, such as the balance of values and the relationship between values and need satisfaction. With this first task
accomplished, it would then be possible to compare the composition of values and perceived level of need satisfaction within the self, with a range of well-being and self-concept variables. This approach may shed light on the questions of relationships between needs, and the universality or relativity of needs for well-being.

The present study has chosen the broad social context of interpersonal interactions to investigate the dynamics of perceived needs and their satisfaction, for two reasons. The first is that a consensus in research recognises that qualities of social interaction are important and are relatively neglected indicators of well-being (Baumeister & Leary, 1995; Cross, Bacon & Morris, 2000; Eckersley & Dear, 2002; Ryff & Keyes, 1995). The second is that perceived needs for autonomy and relatedness, or conversely self-enhancement, independence or control, are likely to be salient in both real and imagined interpersonal contexts (Andersen, Chen & Carter, 2000; Markus & Kitayama, 1991) and are therefore accessible to self-report methodology.

In moving away from the reification of innate needs and towards clarification of need dynamics through examining cognitive aspects of needs, the present study focuses on perceived needs in interpersonal interactions, rather than manipulating or measuring "actual" social supports for need satisfaction. It is expected that, just as in other areas of psychological inquiry, there will be individual differences in perceptions of needs, as well as in satisfaction of perceived needs, regardless of "actual" supports for need satisfaction (Andersen, Chen & Carter, 2000; Pyszczynski, Greenberg & Solomon, 2000) and despite the western cultural background of participants in the present study (Cross, Bacon & Morris, 2000).
The present study aims to build on previous research linking values, needs and self-concept with well-being by exploring cognitive aspects of "need dynamics" including values for different needs, perceptions of need satisfaction, and self-concept. This aim required the development of a new measure of interpersonal needs and values, the Interpersonal Needs Scale (INS), in order to assess and correlate perceived needs and their satisfaction in order to explore the relationships of salutogenic needs to each other, to ego-defensive needs, and to need satisfaction. Study 2 (Chapter 7) uses the INS to further explore need dynamics and their relationship to self-concept, and to various indices of adaptive functioning. These indices include psychological distress, self-esteem, and alienation.

4.2 Some Notes On Terminology

4.2.1 Perceived needs and values

The present study aims to shed light on need dynamics which, according to organismic theory, can explain the creation of human well-being. The present research has identified a shortcoming in SOT research: a failure to adequately address cognitive processes such as perceptions of needs and need satisfaction. Drawing on social-cognitive research, Chapter 2 made the case for linking perceptions of self with types of values and perceived needs. Previous researchers have also linked perceptions of needs with people's preferences for different kinds of experiences (Sheldon et al, 2001) and personal goals (Sheldon & Kasser, 1995). The present study similarly equates values that people hold for different kinds of interpersonal experiences, with perceived needs in that
domain. This formulation is in line with Rokeach’s (1973) definition of values as cognitive transformations of needs.

For clarity, the terms perceived needs and values both refer to people’s conscious preferences for certain experiences: in this case, in interpersonal interactions. Likewise, need satisfaction refers to people’s conscious perception that valued experiences are experienced. Given that perceptions are of interest, the present study makes no distinction between those experiences that might be objectively "supplied" by the environment, and those that might be subjectively perceived. It is important to note that perceived needs as defined here represent values for something; they do not signify a perceived lack of something. To represent perceived lack, the current study uses a further cognitive aspect of needs; lack of satisfaction of perceived needs, or neediness. From a cognitive perspective, needs that are not valued cannot be described as satisfied or unsatisfied, therefore attention is paid to discrepancies between perceptions of needs and their satisfaction, to indicate the level of perceived neediness.

4.2.2 Relative valency of needs

Researchers have found that experiences supporting autonomy and relatedness are most frequently reported as preferred or more important compared to those supporting narcissistic or achievement needs (Ryan et al, 1999; Schmuck et al, 2000; Sheldon et al, 2001). Therefore, it was expected that the majority of participants in the present study will identify experiences relating to autonomy and relatedness in interpersonal interactions as most highly valued. The valency of ego-defensive needs is expected to be less overall. Therefore, it is the relative strength of ego-defensive values compared to
salutogenic values that is of interest, rather than the ranking of ego-defensive values over salutogenic values. It was expected that most participants will report that salutogenic need-satisfying experiences are more valued than ego-defensive need experiences, but that some participants will report ego-defensive needs are more valued compared to other participants. It is this latter group that is referred to as those with ego-defensive needs.

4.3 Aims and Hypotheses for Study 1

4.3.1 Basic Interpersonal Need Dynamics

Self-Determination Theory researchers argue that the salutogenic needs for autonomy and relatedness are complementary, in that they are both involved in the internalisation of need-congruent values, and in the satisfaction of needs (Ryan, 1995). Based on the evidence that fulfilled relatedness needs support the fulfillment of autonomy needs, and possibly vice versa (Ryan), and also based on the finding that values for autonomy and relatedness belong to a higher-order factor (Kasser & Ryan, 1996), it was expected that values for experiences reflecting autonomy and relatedness in interpersonal interactions would be strongly positively correlated.

If autonomy and relatedness are requirements for well-being, then these salutogenic needs should be inherently more satisfying than substitute needs. This assumption has been supported by the finding that salutogenic needs, as values, are more frequently associated with satisfying events compared to other needs (Sheldon et al, 2001) and tend to be rated as more important compared to other needs (Ryan et al, 1999; Schmuck et al, 2000). Even taking account the potential impact of external environmental obstacles to need satisfaction, such as the loss of loved ones, values for salutogenic needs are thought to direct behaviour towards the satisfaction of these needs (Kasser, 2002).
Therefore, the present study predicted that the greater the value placed on salutogenic needs, the more likely they are to be satisfied, on average. Therefore, perceptions of salutogenic needs were expected to be positively associated, overall, with perceived satisfaction of these needs.

A social context or set of personal values that do not support the satisfaction of basic needs may be one where ego-defensive needs for independence, freedom from perceived control by others, and enhancement of self over others are valued (Kasser; Ryan, 1995). Self-Determination Theory suggests that just as the salutogenic values for autonomy and relatedness are complementary, values for independence, control and narcissistic affirmation from others also may also be positively related, given that they share the theme of ego-defensiveness. This premise is supported by correlations between the Narcissistic Personality Inventory (NPI; Raskin & Hall, 1979) and aspects of independence, as measured by the Autonomy subscale of the Adjective Checklist (ACL-A; Gough & Heilbrun, 1983). These include self-reliance, independence and dominance (Gaertner et al, 2002; Raskin & Terry, 1988; Rhodewalt & Morf, 1995). Needs for independence and personal control (versus control by others) may be linked, given that people who report themselves to be independent also tend to report perceptions that others try to control them, and that external control and authority figures are viewed negatively (Koestner & Losier, 1996; Ryan & Lynch, 1989). The present study therefore predicted that values for independence, control and narcissism would be positively correlated.

By their nature, substitute needs do not satisfy requirements for positive functioning, and may undermine the satisfaction of salutogenic needs (Deci & Ryan,
2000). In addition, needs for individual achievement and fame are reported by study participants to be less important compared to salutogenic needs (Ryan et al, 1999; Schmuck et al, 2000) and experiences related to security and popularity are rated as less satisfying compared to those related to autonomy and relatedness (Sheldon et al, 2001). Ryan (1995) has proposed a "vicious cycle" model for ego-defensive needs, claiming that they are inherently unsatisfying substitutes for salutogenic needs. It is therefore predicted that values for independence, control and narcissistic experiences in interpersonal interactions will be negatively related to satisfaction of these needs.

4.3.2. Interpersonal values and self-concept

Social cognitive approaches to personality argue that self-concept, shaped in part by cultural values, provides an all-important cognitive/affective filter through which people perceive their needs, and the necessary conditions for their satisfaction (Greenwald, 1982; Higgins, 1987; Markus & Nurius, 1986; Markus & Kitayama, 1991). By implication, positive functioning depends on fit between self-concept, and perceptions of needs and need satisfaction (Ryan, 1995). Rejecting the assumption of relativity of needs for well-being based on self-concept, and cognitive approaches more generally, SOT research has largely ignored the possible relationships between self-concept and needs.

While the present study argues that needs for well-being are universal and not dependent on self-concept, it is accepted that perceptions of needs may be linked to self-concept. Specifically, it was expected that different types of perceived needs would be linked to associated types of self-concept, but it was also expected that only the
salutogenic values of autonomy and relatedness would support the development of the "healthy" self, encompassing both self-determination and integration with others. Drawing on social-cognitive and SOT research literature reviewed in the previous chapters, there are four self-concepts of interest to the present study. These include the autonomous self, the interrelated self, the independent self, and the narcissistic self.

Self-Determination Theory makes a distinction between autonomy and independence needs, identifying the former as acting according to innermost beliefs and a sense of self, and the latter as valuing freedom from others’ influence (Koestner & Losier, 1996). The autonomous self, drawn from the concept of self-determination in SOT (see section 3.5.1), has no direct counterpart in social-cognitive research, being conceptually distinct from the independent self-concept. The construct of self-determination includes awareness of one's feelings and sense of self, and a sense of choice with respect to one's behaviour (Deci & Ryan, 1987; 2002). Self-determination captures the self-concept based on valued and satisfied autonomy needs, and is measured with the Self-Determination Scale (SDS: Sheldon, Ryan & Reis, 1996). Meanwhile, the Relational-Interdependent Self-Concept (RISC: Cross, Bacon & Morris, 2000) appears to have much in common with satisfied relatedness needs in SOT. Both include internalised values for prosocial behaviour, belonging or being connected to others, valuing relationships, and interdependence. Furthermore, autonomy needs are considered to be complementary to relatedness needs (Ryan, 1995). Therefore, autonomy and relatedness values are expected to be positively related to both autonomous and interrelated self-concepts, and unrelated to independent self-concept.
The independent self has been previously described in detail (see Chapter 1, section 1.2). In brief, the independent self is linked to values for being separate from others, self-reliant, and free from others' control. The present study speculated that people with an independent self-concept would have perceived needs for independence and freedom from other's control and influence. The present study predicted that high scores on the so-called "Autonomy" subscale of the Adjective Checklist (ACL-A: indicating independent self-concept) would be associated with relatively high valuing of independence and control needs. Based on the findings that autonomy and independent self-concept (measured with the ACL-A) are unrelated (Koestner & Losier, 1996) and that independence is incommensurate with relatedness (Hodgins, Koestner & Duncan, 1996); independence and control values were expected to be unrelated to both autonomous self-concept and interrelated self-concept. Finally, challenging the lay notion that independence equates with self-sufficiency (Eckersley, 2001), it was expected that both autonomy and relatedness needs would be positively related to self-sufficiency, while independence and control values, representing ego-defensive needs rather than autonomous self-sufficiency, were expected to be unrelated to self-sufficiency.

Narcissism is a complex personality construct, including both positive (e.g. self-sufficiency) and negative (e.g. entitlement) aspects (Emmons, 1987; Raskin & Terry, 1988). The negative aspects of narcissism, due to their overtly negative social connotations, may be unlikely to be held as conscious values, however they may be perceived as a need for receiving "due" credit or admiration from others. This conceptualisation is similar to the extrinsic values for fame and attractiveness identified by previous research (Kasser & Ryan, 1996) and also agrees with previous research.
regarding underlying processes in narcissism such as self-enhancement and maintenance of high self-esteem (e.g. Morf & Rhodewalt, 2001). The present study, distinguishing between the positive and negative aspects of narcissism, speculated that the entitlement subscale of the Narcissistic Personality Inventory (NPI) would be positively related to narcissistic needs for admiration and appreciation from others. Given that narcissistic values tap into needs for others to support one's self-esteem, it follows that the NPI Self-sufficiency subscale should be negatively related to narcissistic values. It was further speculated that narcissistic values, representing ego-defensive needs, do not support autonomy and relatedness. Therefore, it was expected that narcissistic values would be unrelated to both autonomous and interrelated self-concepts.

4.3.3 Interpersonal values and well-being

The central premise of SDT is that satisfied needs for autonomy and relatedness are vital for psychological growth, emotional and social integration, and positive functioning (Deci & Ryan, 2002). However, values representing salutogenic needs have been suggested to be important cognitive variables linked to well-being (Kasser, 2002) and self-esteem (Ryan & Brown, 2003), perhaps by supporting the satisfaction of salutogenic needs (Sheldon et al, 2001). The present study proposes that autonomy and relatedness values may contribute to well-being via two mechanisms. The first, explored above, proposes that authenticity and belonging values tend overall to be satisfied: they facilitate their own satisfaction. The second mechanism proposes that authenticity and belonging values are salutogenic in themselves. They promote internalisation and autonomous self-regulation, thereby promoting well-being (Kasser, 2002; Sheldon et al),
secure self-worth (Ryan & Brown, 2003), positive relationships, and pro-social attitudes (Kasser, Ryan, 1995). Furthermore, autonomy and relatedness values tend to support satisfaction of these needs, and satisfaction with relationship qualities predicts well-being (Baumeister & Leary, 1995), perhaps by moderating the effects of life stress (Ogden, 2000) or providing meaning and purpose in life (McAdams, 1990). The present study predicted that autonomy and relatedness values would be negatively correlated to psychological distress and alienation, and positively correlated to self-esteem.

As ego-defensive values, it is considered that narcissistic and independence values do not support well-being. Both narcissism and independence needs may tend to be unsatisfied, leading to psychological distress (Ryan, 1995). Individualistic values such as independence and control are thought to promote alienation (Eckersley & Dear, 2002) and research shows that alienation is linked broadly to psychological dysfunction (Ganellen & Blaney, 1984; Kobasa, 1979; Kobasa, Maddi & Kahn, 1980; Maddi, 1998). Narcissism is also linked to devaluing of others (Morf & Rhodewalt, 2001), and therefore narcissistic values may also be positively related to alienation. Furthermore, many researchers have suggested negative consequences for well-being resulting from 'narcissists' repression of an underlying sense of worthlessness, and the stress of constant efforts to maintain self-esteem (e.g. Akhtar & Thompson, 1982; Rhodewalt & Morf, 1995; Rhodewalt & Tragakis, 2003). It was therefore predicted that all ego-defensive values (independence, narcissistic, and control) would be positively related to psychological distress and alienation.

Ego-defensive values have been linked to a need for high self-esteem (Eckersley & Dear, 2002; Kernis, 2003; Rhodewalt & Tragakis, 2003; Tafarodi & Milne, 2002).
However, researchers suggest that self-worth based on these values is unstable (Kernis, 2003; Rhodewalt & Tragakis, 2003; Tafarodi & Milne, 2002), is based on fluctuating external contingencies (Kernis), and reflects a lack of genuine self-worth (Ryan & Brown, 2003). The present study speculates that when ego-defensive needs are met, high (albeit unstable) self-esteem may result. However, it was expected that considering the overall sample, ego-defensive needs tend to be unsatisfied. Therefore, overall, it was expected that self-esteem would be uncorrelated to ego-defensive values.

A final variable was included to support the validity of the INS: a self-estimation of participants' social support and involvement. Participants were asked to estimate the number of friends they had, defined as people who knew them well and who they felt comfortable with (including family members and spouse, if applicable) and the amount of time they spent socialising with friends. It was predicted that both autonomy and relatedness values would be positively related to number of friends and amount of time socialising, and that ego-defensive values would be negatively related to these variables.
Because data collection for Studies 1 and 2 occurred concurrently, the next section discusses the method and procedures for both.

5.1 Participants (Studies 1 and 2)

The sample comprised 95 males ($M = 32$ years, $SD = 14.92$) and 158 females ($M = 30$ years, $SD = 12.11$). Of the total, 94 identified themselves as Australian, 86 as American, and 59 as belonging to other Western countries such as Canada, New Zealand, and the United Kingdom. The remainder ($N=14$) identified themselves as belonging to various Asian countries. A total of 224 identified themselves as belonging to "Western culture", seven as non-Western, and 22 were unsure. Of these 29, only five identified themselves as having a non-western nationality. Just over half the sample reported themselves to be currently single, 25% had completed a university degree, and 10% had not completed secondary school. Exactly 50% identified themselves as belonging to a religious or spiritual group.

A total of 116 respondents reported a diagnosis of mental illness in the past two years. Of these, 82 (32%) reported a diagnosis of social anxiety and 22 (8.7%) reported a diagnosis of depression, with other categories accounting for less than 4%. These figures reflect sampling methods targeting clinical populations (described in section 5.3: Procedure).
5.2 Questionnaire (Studies 1 and 2)

The self-report questionnaire prepared for the present research comprised various demographic items to obtain background information about respondents, and eight measures of self-concept and well-being constructs. These measures included assessment of interpersonal needs, autonomous, relational and independent self-concept, narcissistic personality, psychological distress, self-esteem and alienation.

The demographic section included questions to determine age, gender, educational and relationship status, and history of mental health. It also included a brief set of questions to assess respondents' social network. Respondents were asked to indicate their approximate number of "close" friends; defined as "those people who know you well and who you feel comfortable with; count your partner and relatives if applicable" on a scale ranging from 1 = none, 2 = 1 or 2 close friends, 3 = 3 - 6 close friends, and 4 = more than 6 close friends. Respondents were then asked to indicate the average number of hours they spent socialising with friends each week, defined as "chatting, relaxing, playing sports together etc", 1 = 1-2 hrs per week or less, 2 = 3-6 hours per week, 3 = 7 - 12 hrs per week, or 4 more than 12 hours per week. These questions were designed to exclude socially insignificant or routine interactions with casual acquaintances or work colleagues.

5.2.1 Interpersonal Need Scale.

A pool of 50 items was developed for the present study to assess respondents' valuing of and satisfaction with different aspects of their interpersonal interactions. These represent five proposed dimensions of interpersonal experience, and include: Narcissism,
being appreciated and admired by others; Control, being free from others' control, Relatedness, a sense of shared experience and belonging; Autonomy, being one's true self around others; and Independence; being separate from others. The proposed INS items were designed to have high face validity. INS items are reproduced in Table 6.1, Chapter 6.

The INS items are divided into two sets: the Values set and the Need Satisfaction set. The Values set includes items representing the five different interpersonal needs of interest: Autonomy, Relatedness, Independence, Narcissism, and Control: and instructs participants to indicate the subjective importance of these different aspects of their interactions with others. The Need Satisfaction set includes the same items, with slightly modified wording, and asks respondents to indicate their satisfaction with each aspect of interpersonal interactions. For example, for the Narcissistic Value item "Showing others what I am best at doing" respondents were asked to indicate on a seven point Likert scale how important the value is, ranging from 1 = not at all important to 7 = very important. To assess need satisfaction, the item was reworded and respondents asked to indicate their degree of satisfaction regarding "Opportunities for showing others what I am best at doing" with responses ranging from 1 = not at all content, to 7 = very content.

Following factor analysis (see Chapter 6, section 6.3.2), a final version of the INS was produced for use in Study 2. Control items loaded onto the Narcissistic and Independence factors, while Autonomy and Relatedness items combined and loaded onto two separate, new factors (see Chapter 6, section 6.3.2) with the result that the final version of the INS consists of four Value subscales. These were the Authenticity Values (AV: four items) and Belonging Values (BV: six items) subscales, both consisting of a
combination of the original Autonomy and Relatedness items; and the Narcissistic Values (NV: six items), and Independence Values (IV: eight items) subscales, both including some original Control items. The need satisfaction items were arranged to correspond with the Value subscales, giving four Need Satisfaction subscales: Authenticity Satisfaction (AS), Belonging Satisfaction (BS), Independence Satisfaction (IS) and Narcissistic Satisfaction (NS). Due to the unequal number of items in the subscales, item means were calculated to give a score for each Value and Need Satisfaction subscale.

The INS is designed to be a measure of interpersonal needs, in terms of the degree to which different interpersonal needs are valued, and the degree to which proposed needs are being satisfied. The INS Values subscale totals can be used by themselves to measure perceived interpersonal needs. A high mean score on a Values subscale indicates subjective importance of that aspect of interpersonal interaction. Need Satisfaction subscale scores can be used to indicate perceived satisfaction with each interpersonal domain. Mean scores on the Need Satisfaction subscales can be subtracted from mean scores on corresponding Value subscales to give new scores representing discrepancies between valued dimensions of interactions, and the satisfaction of these relational needs. The larger the discrepancies between corresponding Value and Satisfaction subscale scores, the greater the dissatisfaction of perceived interpersonal needs, or in other words: interpersonal "neediness" in a given interpersonal domain. For example, a respondent may record a mean Narcissism Value (NV) subscale score an average of 7, indicating that appreciation from others is an important relational value, and score the corresponding Narcissism Satisfaction (NS) item as a 1, indicating that she perceives that her value for
appreciation is not being satisfied. Subtracting $NS=1$ from $NV=7$ gives a discrepancy score of 6, indicating high narcissistic neediness.

As discussed in Chapter 6, the final 24-item INS subscales have face validity, and show satisfactory reliability and validity.

5.2.2 Autonomously self-concept

Autonomy, defined as "the extent to which one regulates oneself according to internalised and need-congruent beliefs or values", was assessed using the Self-Determination Scale (SDS; Sheldon & Deci, 1996). The SDS was designed to assess individual differences in the extent to which people function in an autonomous or self-determined manner, and consists of two, five item subscales. The Self-Contact subscale assesses awareness of feelings and sense of self, for example "My emotions sometimes seem alien to me" versus "My emotions always seem to belong to me". The Choicefulness subscale assesses the degree of control versus choice regarding one’s behaviour, for example "I am free to do whatever I decide to do" versus "What I do is often not what I choose to do". The items are presented as dyadic, contrasting statements scored on a five-point Likert scale from 1=only statement A feels true to 5=only statement B feels true. After recoding reversed items, participants responses can be summed to subscale totals or an overall self-determination index. The possible range of scores is from 5 (very high autonomy) to 50 (very low autonomy). This scale was reversed in the present study so that higher scores represented higher self-determination, for ease of comparison to other scale scores. The scale has good internal consistency (alphas range from .85 to .93; Sheldon, Ryan & Reis, 1996) and adequate test-retest
reliability over eight weeks \( (R = .77; \text{Sheldon} \& \text{Deci}, 1996) \). The SDS has good construct validity, and has been shown to be a predictor of psychological health outcomes (Grow, Sheldon, \& Ryan, 1994; Sheldon, 1995; \& Sheldon \& Deci, 1996; Sheldon, Ryan, \& Reis, 1996).

5.2.3 *Independent* self-concept

Independent self-concept, defined as the tendency "to act independently of others or of social values or expectations" (Gough \& Heilbrun, 1983) was assessed using the Autonomy subscale of the Adjective Checklist (ACL; Gough \& Heilbrun). The ACL requires respondents to circle any of 300 trait adjectives that they identify as self-descriptive. Independence is assessed by 44 adjectives, including 29 positive descriptors (e.g. Independent, Self-centered, Assertive) and 15 negative indicators (e.g. Conventional, Cooperative). Any circled positive descriptors and uncircled negative descriptors are scored +1, with remaining descriptors scored 0. The sum of descriptors scored 1 is used as the measure of Independence. Gough and Heilbrun (1983) report an internal reliability of .69 for the scale, and a test-retest reliability over six months of .76. In an attempt to improve the internal reliability of the measure, the present study added a further four items; three positive descriptors (Competitive, Dominant, and Ambitious) and one negative descriptor (Soft-hearted). These items were chosen on careful reading of related research. The total possible score ranges from 0 to 48, with high scores indicating greater Independence.

Independence as measured by the ACL Autonomy subscale has good construct validity. High scorers have been described by peers as assertive, unconventional,
independent and socially insensitive, and observer ratings of high NPI scorers using the ACL include many ACL Autonomy adjectives (Gough & Heilbrun, 1983). In contrast to the adaptive, responsible behaviour described by Deci and Ryan (2000) as indicative of self-determined autonomy, high ACL Autonomy scorers tend to act in rebellion against perceived external controls (e.g. parents and authority figures) rather than choosing their actions based on internalized values (Koestner & Losier, 1996). ACL Autonomy has predicted dislike of work environments that require teamwork (O’Reilly, Chatman & Caldwell, 1991) and is positively related to dropping out of college (Heilbrun, 1965). Males tend to endorse more ACL Autonomy adjectives as self-descriptive than do females (Koestner & Losier) and scores are reported to be unrelated to socially desirable responding (Gough & Heilbrun).

5.2.4 Relational-interdependent self-concept

To assess the degree of self-definition in terms of relationships with others, the present study utilized the Relational-Interdependent Self-Construal Scale (RISC; Cross, Bacon & Morris, 2000). The 11-item RISC scale consists of items such as “My close relationships are an important reflection of who I am”, scored on a Likert-type scale ranging from 1=strongly disagree to 7=strongly agree. After recoding reversed items, the RISC provides a total score range from 11 (very low relational self-construal) to 77 (very high relational self-construal). Reliability for the RISC is reported to be good (a = .88) while test-retest reliability over one month was acceptable (R = .74; Cross, Bacon & Morris). The RISC has been shown to correlate positively with measures of empathy,
social support, collectivism and communal orientation, and to be uncorrelated with the Marlowe-Crowne Social Desirability scale (Cross, Bacon, & Morris).

5.2.5 Narcissistic personality

The Narcissistic Personality Inventory (NPI) developed by Raskin and Hall (1979, 1981) and modified by Raskin and Terry (1988) was designed to measure the traits specified in DSM III as descriptive of narcissistic personality disorder, in non-clinical populations. The original presentation of the NPI utilized a forced-choice response between dyadic statements, while the present study modified this format to a five-point Likert-type scale. Respondents are requested to indicate their agreement with statements such as "If! ruled the world it would be a much better place". The Likert format is more sensitive to variations in a given trait, and is in line with the intentions of the measure’s design; to tap individual differences in narcissistic traits in nonclinical populations, rather than merely confirmation of criteria for the extreme behaviours seen in pathological narcissists (Emmons, 1984; Raskin & Terry, 1988). Of the seven subscales of the NPI, four were used in the present study: Authority (NPI-A, 7 items) and Self-sufficiency (NPI-S, 6 items), representing the "positive" side of narcissism, and Entitlement (NPI-En, 6 items) and Exploitativeness (NPI-Ex, 5 items), representing the "negative" aspects (Emmons). Possible subscale score ranges are for NPI-A: 7 - 35, NPI-S: 6 - 30, NPI-En: 6 - 30, and NPI-Ex: 5 - 25. High scores indicate a high degree of narcissism with respect to the given subscale. Each subscale correlates highly with the NPI as a whole (Raskin & Terry, 1988) and has acceptable internal reliability (α = 0.80-
0.86; Raskin & Terry, 1988). The NPI overall has good alternate-form retest reliability over an eight week period ($R = 0.72$; Raskin & Hall, 1981).

Studies investigating the positive and negative aspects of narcissism show that the Authority and Self-sufficiency subscales correlate positively with measures of self-esteem, empathy and self-confidence, and negatively with self-abasement, self-ideal discrepancy, neuroticism and social anxiety (Emmons, 1984; Watson, Grisham, Trotter & Biderman, 1984). The negative aspects of narcissism, Entitlement and Exploitation, tend to be more strongly associated with observer ratings of manipulative social behaviours, and correlate negatively with empathy (Raskin & Terry, 1988; Rhodewalt & Morf, 1995; Watson et al). Using NPI total scores, numerous studies using a wide variety of personality measures have found good support for construct validity, and strong agreement has been found between self-ratings on the NPI and observer-ratings of narcissistic behaviours (eg Emmons, 1984; Raskin & Hall, 1981; Raskin & Terry, 1988; Rhodewalt & Morf, 2001; Watson et al, 1984).

5.2.6 Psychological Distress

Levels of self-reported depression, anxiety and stress was measured using the Depression, Anxiety and Stress Scale, short form (DASS:21, Lovibond & Lovibond; 1995). The DASS:21 was developed to assess the severity of core symptoms of depression, anxiety and stress, and clarify the locus of emotional distress amongst these three dimensions. The DASS:21 consists of seven items each for three subscales; Depression, Anxiety and Stress. The DASS:21 was designed to measure state distress, but can readily be modified to indicate more general or trait-like distress (Lovibond & Lovibond). To measure general distress, the present study requested participants to
indicate their general experience or mood, according to statements such as; "I feel downhearted and blue" (Depression subscale) by marking a four-point Likert type scale, from 0=does not apply to me at all, to 3=applies very much or most of the time. The possible range of scores is from 0 to 21 for each subscale, and high scores indicate a greater degree of distress. The DASS:21 is reliable; Cronbach’s alphas are reported to be .94 for Depression, .87 for Anxiety, and .91 for Stress (Antony et al, 1998). The DASS:21 distinguishes well between features of depression, physical arousal associated with anxiety, and tension and agitation associated with stress, and correlates in expected directions with other well-validated measures of depression and anxiety (Antony et al).

5.2.7 Alienation

Alienation was assessed using the Alienation Test developed by Salvatore Maddi and his colleagues (1979). The Alienation Test was originally devised as a comprehensive measure of existential "hardiness"; the ability and commitment to have meaning and purpose in life, and to have an internal locus of control (Maddi, Kobasa & Hoover). "Hardiness" is assessed by reversing Alienation Test scores. The four Alienation Test subscales used in the current study assesses alienation across four contexts (Social Institutions, Family, Interpersonal Relations and Self). Each subscale includes 12 items. The original scoring procedure instructs respondents to select a value between 0 (not at all true) and 100 (completely true) to indicate their agreement with each item, thus high scores indicate a greater degree of alienation (and low scores indicate greater hardiness). The present study converted this scoring format to a 10 point Likert-type scale for the sake of consistency with other measures used in the present study. The
possible range of scores is 0 to 120 for each subscale. The Alienation Test is reliable, with Cronbach's alphas for each context of alienation ranging between .72 and .90, while test-retest stability over three weeks is adequate (Robinson, Shaver, & Wrightsman, 1991). Hardiness (low alienation) has been found to moderate the ill effects of life stress (Ganellen & Blaney, 1984; Kobasa, Maddi, & Kahn, 1980; Kobasa, 1979) and support intrinsic motivation (Maddi, Hoover & Kobasa, 1982).

5.2.3 **Self-esteem**

The present study used the Rosenberg Self-Esteem Scale (SES; Rosenberg, 1965) a widely used measure of global feelings of self-worth and self-acceptance. The SES consists of 10 items, such as “I have a number of good qualities”, scored on a four point Likert-type scale, from 1 = strongly agree to 4 = strongly disagree. After reverse scoring negative items, the SES yields a total score ranging from 10 to 40 with higher scores reflecting greater self-esteem. Internal consistency for the SES is good, ranging from \( r = 0.77 \) (Dobson et al, 1979) to \( r = 0.88 \) (Fleming & Courtney, 1984). Test-retest correlation is reported to be high for a two week interval (Silber & Tippett, 1965). The SES has broad support for validity, such that it is the standard against which new measures are evaluated (Robinson, Shaver & Wrightsman, 1991).

5.3 **Procedure (Studies 1 and 2)**

From the total of 253 participants, 82 completed paper questionnaires. Some \( (N=48) \) were completed by first year psychology students from a Melbourne university. These respondents participated as part of a course requirement for research participation.
Others \((N=34)\) were completed by volunteers sourced through snowball sampling via acquaintances of the researcher. The remainder of the sample \((N=171)\) submitted their responses electronically, using the university "Surveyor" electronic questionnaire website. This website is linked to the university homepage, and displays details of postgraduate studies and invitations for members of the public to participate in research. Statements of disclosure and participants' rights are presented. The electronic version of the current questionnaire was reproduced from the paper version and is virtually identical to it, with the exception of minor format changes.

Invitations for voluntary and anonymous participation in the study were placed at various Internet websites and forums, including social anxiety and narcissistic personality disorder support sites, and a psychology interest group forum. The 171 completed electronic responses came from a total of more than 500 "hits" on the website (a response rate of 34\%, compared to a response rate of approximately 25 \% for paper questionnaires). All of the 116 respondents who reported a diagnosis of social anxiety or other psychological disorder were amongst the electronic responses, reflecting the population of the websites and forums on which invitations to participate were placed. Differences in well-being between internet and paper questionnaire respondents are explored in Chapter 6, section 6.4.2.

All respondents were requested to complete questionnaires in their own time, either returning them to the university via postage-paid envelopes provided, or electronically posting the electronic version by completing and sending their responses. Anonymity of respondents was maintained throughout the procedure.
CHAPTER 6
CONSTRUCTION AND VALIDATION OF THE
INTERPERSONAL NEEDS SCALE (INS)

6.1 Introduction

The present study proposes to investigate perceived needs and perceived need satisfaction within the domain of interpersonal interactions. To achieve this, it was first necessary to construct and validate a new measure: the Interpersonal Needs Scale (INS). This measure consists of a pool of five values derived from both the social cognitive and self-determination theory literature. Derived from the concept of the independent self are values for independence from others' influence (Independence), freedom from others' control (Control) and being admired or appreciated by others (Narcissism). These values can be described as ego-defensive, according to Self-Determination Theory. Derived from the concepts of the interdependent self is the value for Relatedness: being with others, mutual support, and sharing of experience. Finally, drawing on the distinction between ego-defensive independence and autonomy proposed by SOT, the value for Autonomy is defined by being one's true self around others, acting according to innermost beliefs, and being around others whom one finds to be interesting.

These values are not intended to represent an exhaustive list of interpersonal needs. Other needs suggested by the literature include achievement and self-efficacy needs, which reflect the third basic need for well-being proposed by SOT: competence. While perceptions of social competence are likely to affect interpersonal well-being, the aim of the present study was to unpack those values which are proposed to be linked to
both well-being and self-concept. Therefore, needs for competency were not selected for investigation in the present study.

While the five INS values or perceived needs are treated as qualitatively distinct, previous researchers have suggested that different values can be complementary or otherwise associated with each other. Autonomy and relatedness values are proposed to be complementary or positively associated with each other, while the values for independence, narcissism, and control may also be related to each other given that they share a theme of ego-defensiveness, and conceptually each derives from the independent self. Furthermore, while it was expected that some values may hold greater subjective importance or desirability for a given individual than other values, it was also assumed that each of the proposed values may co-exist together in the same person, while perhaps differing in the degree of perceived importance. Indeed, an important research aim of the present study is to explore the patterns or dynamics of co-existing values. Based on these assumptions, the INS measure does not force respondents to rank values in order of importance, but instead allows them to give different interpersonal values discrete scores. In this way, not only the relative strengths of values but also the relationships between them can be assessed.

The present study makes a theoretical and methodological distinction between values, representing desired outcomes, and need satisfaction, representing perceived need fulfillment in each interpersonal value domain. The proposed measure of interpersonal needs is intended to distinguish between qualitatively distinct interpersonal values, and to indicate the degree to which these perceived needs are being satisfied. Based on previous research suggesting that need satisfaction is subject to individual differences, in the
present study, need satisfaction is treated as a subjective cognitive variable. Therefore, each item representing an interpersonal value has a corresponding item representing the degree to which the perceived need is being satisfied. This cognitive approach is in contrast to previous approaches in SDT, which have focused on proximal, actual environmental supports for need satisfaction, or on distal environmental supports including culture (Chirkov et al, 2003).

6.2 Summary of Aims for Study I

Study 1 aims to identify qualitatively distinct interpersonal values from a pool of items developed from examination of needs, motives and values literature, and to establish the reliability and validity of a new measure of interpersonal values and need satisfaction, the Interpersonal Need Scale (INS). The INS comprises two sets of items: the Values set and the Need Satisfaction set, representing five different interpersonal needs: Autonomy, Relatedness, Independence, Narcissism, and Control. SPSS version 12 statistical software was used for the statistical analysis of the INS.

6.3 INS Factor Analysis

6.3.1 Initial INS data screening

Missing values for the values items of the INS were replaced with the item mean computed from the whole sample, a technique recommended for maximizing available data provided less than 30% of values are missing (Tabachnick & Fidell, 1996). One case had greater than 30% missing values, and was excluded. Two cases reported extremely low values for INS Independence Values (IV) and one case reported extremely low
values for Narcissistic Values (NV). Due to the sensitivity of statistical analyses used in the present study to outliers, these cases were excluded from the analysis. Shapiro-Wilks statistics indicated that INS Values subscales were significantly negatively skewed, however the data was left untransformed for three reasons. Firstly, analyses used in the present study are robust to violations of normality provided that these are not due to outliers, and that all cell sizes comprise greater than 20 cases each (Tabachnik & Fidell). These conditions were met. Secondly, based on the findings of previous research (Schwartz & Bilsky, 1990), the present study assumes that people tend to report high scores for items assessing values. Therefore, negatively skewed INS values in the sample may be an accurate reflection of the average ratings of interpersonal values in the population. Thirdly, transforming INS value scores decreases the differences (discrepancies) between value and satisfaction scores, which would misrepresent the magnitude of perceived interpersonal needs (in terms of”neediness”) reported by the sample.

6.3.2 Factor analysis

To identify sets of distinct interpersonal values according to arguments outlined in the Introduction, a factor analysis was performed on the 25 Values items of the Interpersonal Needs Scale. While INS Need Satisfaction items reflect Values items, they were designed to produce discrepancy scores and as such were not designed to reflect discrete underlying factors. Rather, it was expected that the 25 Need Satisfaction items would reflect only one underlying factor: subjective satisfaction of interpersonal needs. An exploratory factor analysis using various extraction and rotation methods confirmed
this expectation: only one Need Satisfaction factor with an eigenvalue greater than 1 was produced. For these reasons, Need Satisfaction items were not included in the INS Values factor analysis.

The factor analysis used principal axis factoring and oblimin rotation to take into account the expected overlap between factors. The Keiser-Meyer-Olkin statistic indicated a high amount of shared variance (.89) and Bartlett's test of sphericity was significant ($3168, p < .001$) indicating the correlation matrix was significantly different from zero. The analysis produced four eigenvalues greater than one, which together accounted for 57.7% of the variance. Given the sample size of approximately 250, factor loadings less than .35 were considered non-significant. Only one item, item 25: "Being a unique person, not just another member of the pack", was excluded according to this criterion. Factor loadings for the remaining items are given in Table 6.1 below.
### Table 6.1
Factor Loadings/or INS Items

<table>
<thead>
<tr>
<th>INS Items</th>
<th>Belonging</th>
<th>Authenticity</th>
<th>Narcissism</th>
<th>Individualism</th>
</tr>
</thead>
<tbody>
<tr>
<td>13. (R) Joining in; doing something everyone wants to do together</td>
<td>0.66</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. (A) The chance to do things I truly enjoy with others</td>
<td>0.66</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. (R) Having the chance to really get to know each other</td>
<td>0.65</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. (A) Being able to express myself freely; being my true self around others</td>
<td>0.48</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23. (R) Helping each other out and sharing our ups and downs</td>
<td>0.59</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24. (A) Sharing my personal perspective or experience with others</td>
<td>0.61</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. (R) An equal give and take between other people and myself</td>
<td></td>
<td>0.47</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. (A) Being around people I find personally interesting</td>
<td></td>
<td>0.46</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. (R) An understanding and respect for each others perspective</td>
<td></td>
<td>0.67</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. (A) Acting according to my innermost values and beliefs around others</td>
<td></td>
<td>0.63</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. (N) Showing others what I am best at doing</td>
<td></td>
<td></td>
<td>0.60</td>
<td></td>
</tr>
<tr>
<td>2. (C) Having others recognise that I am at least as good as they are</td>
<td></td>
<td></td>
<td>0.71</td>
<td></td>
</tr>
<tr>
<td>6. (N) Being given the credit that is due to me</td>
<td></td>
<td></td>
<td>0.77</td>
<td></td>
</tr>
<tr>
<td>7. (C) Making sure others do the right thing by me</td>
<td></td>
<td></td>
<td>0.60</td>
<td></td>
</tr>
<tr>
<td>11. (N) Others showing appreciation of my good points and efforts</td>
<td></td>
<td></td>
<td>0.84</td>
<td></td>
</tr>
<tr>
<td>12. (C) Being able to prove my point or get others to respect my opinion</td>
<td></td>
<td></td>
<td>0.59</td>
<td></td>
</tr>
<tr>
<td>16. (N) Others letting me know that I am attractive, interesting, or important to them</td>
<td></td>
<td></td>
<td>0.58</td>
<td></td>
</tr>
<tr>
<td>21. (N) Having others ask me for my advice or opinion</td>
<td></td>
<td></td>
<td></td>
<td>0.38</td>
</tr>
<tr>
<td>5. (I) Being able to do things my way without hassles from others</td>
<td></td>
<td></td>
<td>0.60</td>
<td></td>
</tr>
<tr>
<td>10. (I) Not having limits or restrictions set on me by others</td>
<td></td>
<td></td>
<td>0.72</td>
<td></td>
</tr>
<tr>
<td>15. (I) Being myself, no matter what others think</td>
<td></td>
<td></td>
<td>0.47</td>
<td></td>
</tr>
<tr>
<td>17. (C) Not being controlled or manipulated by others</td>
<td></td>
<td></td>
<td>0.64</td>
<td></td>
</tr>
<tr>
<td>20. (I) Having other people respect my way of doing things, even if they don't agree</td>
<td></td>
<td></td>
<td>0.38</td>
<td></td>
</tr>
<tr>
<td>22. (C) Not being pushed around, or made to feel insecure</td>
<td></td>
<td></td>
<td></td>
<td>0.41</td>
</tr>
</tbody>
</table>

Note: N = 248; R = Relatedness, A = Autonomy, N = Narcissistic, I = Independence and C = Control Items
The pattern matrix produced four clear factors; which were named Belonging Values (BV), Authenticity Values (AV), Narcissistic Values (NV), and Independence Values (IV). Both the BV (six items) and AV (four items) factors comprised a combination of autonomy and relatedness items. Belonging Values included autonomy and relatedness items that describe social activities such as "having the chance to really get to know each other" (relatedness) and "being able to express myself freely" (autonomy). Belonging Values reflect the subjective importance of participating in social interactions for the purposes of sharing experiences and building relationships with others, including autonomous behaviours such as self-expression. These values are proposed to reflect the needs of the Interdependent self, such as social participation (Baumeister & Leary, 1995) and also the social processes associated with internalisation of values (Ryan, 1995) and genuine self-worth (Leary, 2003; Ryan & Brown, 2003) which involve responsiveness to others’ feedback.

Authenticity Values also included both autonomy and relatedness values, but these tend to reflect a more cognitive evaluation of interpersonal interactions compared to Belonging Values, such as perceived equality: "an understanding and respect for each others' perspective", and being personally autonomous, such as "acting according to my innermost values and beliefs around others". These values together suggest that the subjective importance of being one's true self, the core of autonomy as described in SDT (Deci & Ryan, 2002), is linked to values for others’ right or need to also be their true selves. These results support the argument that autonomy, unlike independence, is not an ego-defensive need. Rather, it is argued that autonomy represents acting according to fully internalised or self-authentic values, and further that the process of internalisation of
values is supported by qualities of relatedness or equality between self and other (Ryan, 1995). The social nature of the internalisation of values may support a sense of shared values, and thereby the recognition of others as having needs equivalent to the self; such as the mutuality of autonomy needs. It was decided to name this factor Authenticity Values to reflect the internalisation and mutuality (versus ego-defensiveness) of autonomy and relatedness values.

Narcissism Values (eight items) included most of the original narcissistic and control items, and comprised items reflecting needs for personal power or esteem from others, such as "making sure others do the right thing by me" (control) and "being given the credit that is due to me" (narcissism). These items share a theme of entitlement from others, a core component of narcissistic traits (Morf & Rhodewalt, 2001), and the need for admiration from others, a characteristic of insecure, defensive self-esteem (Kernis, 2000; 2003). This contingent self-esteem is in contrast to autonomous responsiveness to social feedback (represented by Belonging Values) that may support secure self-esteem (Leary, 2003; Ryan & Brown, 2003).

Independence Values (six items) contained the items most expressive of the need to be free of others' influence, such as "being myself, no matter what others think". This factor included two "control" items, such as "not being controlled or manipulated by others", Independence Values reflect the concept of reactive or ego-defensive independence needs (Koestner & Losier, 1996) rather than the mutual-autonomy needs represented by Authenticity Values. Independence values for being oneself are linked to being free from others' influence, while authenticity includes values for equality and shared experience.
Overall, these results show that the INS values items reflect four distinct factors or subscales: the proposed salutogenic values Authenticity Values (AV) and Belonging Values (BV), each comprising the original relatedness and autonomy items, and the ego-defensive Narcissistic Values (NV), and Independence Values (IV). No separate factor for control values was found: instead, control items loaded onto the independence and narcissistic factors. Due to an unequal number of items in each scale, total scores for each scale were not computed: rather, mean scores were computed for each subscale.

6.3.3 Subsequent INS data screening and reliability

Data screening on the INS factors revealed one univariate outlier, with an extremely low mean score for Authenticity Values (AV). This case was excluded from further analysis. Shapiro-Wilks statistics indicated that the INS Values subscales remained significantly negatively skewed, but were left untransformed for the reasons outlined above. Resultant Cronbach’s alphas for each factor were satisfactory and are presented in Table 6.2 along with descriptive statistics.

6.4 INS Validity Testing

6.4.1 Data screening

Missing values for all measures were replaced with the item mean computed from the whole sample to maximize available data (Tabachnick & Fidell, 1996). After excluding INS outliers (see above), no other univariate outliers were detected. Most variables approximated normal distribution, except INS values subscales (see above), and the Autonomy subscale of the Adjective Checklist (ACL-A). ACL-A scores were moderately
significantly negatively skewed, however transformations did not improve normality and the original data was used. Mean scores, score ranges, and reliability statistics for each measure are presented in Table 6.2 below.

Table 6.2.

*Descriptive and Reliability Statistics for All Measures*

<table>
<thead>
<tr>
<th>Measure</th>
<th>Actual Range</th>
<th>M</th>
<th>SD</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authenticity Value (AV)</td>
<td>2.5 - 7</td>
<td>5.92</td>
<td>.85</td>
<td>.77</td>
</tr>
<tr>
<td>Belonging Value (BV)</td>
<td>1.7 - 7</td>
<td>5.56</td>
<td>.16</td>
<td>.89</td>
</tr>
<tr>
<td>Independence Value (IV)</td>
<td>3 - 7</td>
<td>5.87</td>
<td>.71</td>
<td>.77</td>
</tr>
<tr>
<td>Narcissistic Value (NV)</td>
<td>1.5 - 7</td>
<td>4.71</td>
<td>.22</td>
<td>.77</td>
</tr>
<tr>
<td>Authenticity Satisfaction (AS)</td>
<td>1 - 7</td>
<td>4.27</td>
<td>.62</td>
<td>.87</td>
</tr>
<tr>
<td>Belonging Satisfaction (AS)</td>
<td>1 - 7</td>
<td>4.12</td>
<td>.76</td>
<td>.95</td>
</tr>
<tr>
<td>Independence Satisfaction (IS)</td>
<td>1 - 7</td>
<td>4.19</td>
<td>.61</td>
<td>.92</td>
</tr>
<tr>
<td>Narcissistic Satisfaction (NS)</td>
<td>1 - 7</td>
<td>4.16</td>
<td>.44</td>
<td>.93</td>
</tr>
<tr>
<td>Autonomy (SOS)</td>
<td>12 - 50</td>
<td>32.39</td>
<td>.49</td>
<td>.86</td>
</tr>
<tr>
<td>Related-Self (RISC)</td>
<td>15 - 77</td>
<td>50.55</td>
<td>.22</td>
<td>.82</td>
</tr>
<tr>
<td>Independence (ACL-A)</td>
<td>5 - 31</td>
<td>17.38</td>
<td>.50</td>
<td>.71</td>
</tr>
<tr>
<td>Obsession-Anxiety-Stress (OAS)</td>
<td>0 - 62</td>
<td>29.22</td>
<td>.59</td>
<td>.94</td>
</tr>
<tr>
<td>Narcissistic Personality Inv. (NPI)</td>
<td>36 - 115</td>
<td>66.5</td>
<td>.18</td>
<td>.92</td>
</tr>
<tr>
<td>Self-Esteem Scale (SES)</td>
<td>10 - 40</td>
<td>25.94</td>
<td>.73</td>
<td>.91</td>
</tr>
<tr>
<td>Alienation Test (AT)</td>
<td>9 - 460</td>
<td>218.3</td>
<td>.52</td>
<td>.97</td>
</tr>
</tbody>
</table>

*Note*

N=248

Table 6.2 shows that the value for Authenticity in relationships was the highest on average in the present sample, followed closely by values for Independence and Belonging, while average scores for Narcissistic values were slightly lower. There was very little difference between satisfaction scores for each INS satisfaction subscale, and
the sample as a whole reported satisfaction levels just above the midway mark, on a scale of 7 = completely satisfied to 1 = completely unsatisfied. Reliability figures for all measures were satisfactory.

6.4.2 Heterogeneity of the sample

As described in Chapter 5, the present study sourced volunteer participants from clinical populations, namely members of social anxiety and narcissistic disorder website forums. Other participants were sourced from first-year psychology students and acquaintances of the researchers. It was expected that there would be significant differences in well-being and personality measures between the internet-sourced respondents and those who completed paper questionnaires. One-way ANOVA using origin of response (internet or paper-questionnaire) as the dependent variable found significant differences in mean scores on all well-being and personality variables, with the exception of the measures for interrelated-self (RISC) and independent-self (ACL-A), at the .001 level of significance. Internet respondents had higher mean scores for psychological distress (DASS:21), narcissism (NPI subscales total) and alienation (Alienation Test subscales total), and lower mean scores for autonomous-self (SDS) and self-esteem (SES) compared to the paper-questionnaire respondents. The differences between populations are meaningful in the interpretation of later analyses, and are discussed further in Chapter 8: Results for Study 2, and Chapter 9: Discussion. However, for the current purposes of assessing the relationships between INS values, need satisfaction and other measures of self-concept and well-being, with heterogeneity was considered advantageous.
6.4.3 Correlations between INS Value subscales

The present study argues that if both autonomy and relatedness are "needed" for well-being, they should be complementary values rather than antagonistic (negatively related) or unrelated values. This expectation is supported by the evidence that fulfilled relatedness needs support the fulfillment of autonomy needs, and possibly vice versa (Ryan 1995), and is also based on the finding that values for autonomy and relatedness belong to a higher-order factor (Kasser & Ryan, 1996).

The results of the factor analysis suggest that autonomy and relatedness values are closely linked, and are best distinguished according to values for social participation (Belonging) and expressing the autonomous or genuine self (Authenticity). It is proposed that Belonging Values represent the social activities involved with fulfilling autonomy and relatedness needs, such as autonomous social responsiveness, and that Authenticity Values represent the conscious recognition, via full internalisation of values, of mutual autonomy needs. Like autonomy and relatedness, Belonging and Authenticity needs could be described as complementary in that they both support values for social participation and autonomous behaviour of self and others. Accordingly, it was predicted that interpersonal values for Authenticity (AV) and Belonging (BV) would be moderately positively correlated.

Previous research has distinguished between autonomy and independence needs, arguing that the former reflects internalised values while the latter represents a reaction against the influence of others. While previous research has found that autonomous and independent interpersonal styles are uncorrelated (Koestner & Losier, 1996), other researchers argue that autonomy and independence needs both retain the concept of self-
reference and self-expression, suggesting some overlap between autonomy and independence (Brewer & Gardner, 1996; Oeci & Ryan, 2002). It was therefore predicted that there would be weak positive relationships between Independence Values and both Authenticity and Belonging Values (given that both AV and BV include autonomy values). These relationships were expected to be weaker than the relationship between AV and BV.

Narcissism also includes the concept of self-reference, as well as needs for social opportunities to fuel positive self-evaluation (Morf & Rhodewalt, 2001) again suggesting some overlap between narcissistic values, and autonomy and relatedness values. It was therefore predicted that NV would be weakly positively correlated with both AV and BV. Finally, it has been proposed that independence and narcissistic values are ego-defensive (Oeci & Ryan, 2000), and the results of the factor analysis support this proposal in that both IV and NV include ego-defensive "control" items. Therefore, it was expected that IV and NV would be moderately positively correlated. Intercorrelations between INS Value subscales are presented in Table 6.3.
Table 6.3

*Correlations between INS Values.*

<table>
<thead>
<tr>
<th>INS Value Subscales</th>
<th>AV</th>
<th>BV</th>
<th>IV</th>
<th>NV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authenticity Value (AV)</td>
<td>.58*</td>
<td>.34*</td>
<td>.27*</td>
<td></td>
</tr>
<tr>
<td>Belonging Value (BV)</td>
<td></td>
<td>.32*</td>
<td></td>
<td>.34*</td>
</tr>
<tr>
<td>Independence Value (IV)</td>
<td></td>
<td></td>
<td>.43*</td>
<td></td>
</tr>
<tr>
<td>Narcissistic Value (NV)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note*

N=248

*Correlation is significant at the .05 level*

**Correlation is significant at the .01 level*

The intercorrelations of INS Value subscales closely support predictions. AV and BV were moderately positively related, supporting the proposal that these two values are complementary. As predicted, the relationships between IV and both AV and BV are positive but weak. These relationships can be explained by the common theme of self-reference between IV and autonomy values. NY is also weakly positively related to both AV and BV, perhaps due to a shared theme of self-reference and common needs for social participation. As expected, NV is moderately positively related to IV, lending further support to the argument that these two interpersonal values share a theme of ego-defensiveness.

6.4.4 INS Values and Need Satisfaction correlations

The present study proposes that AV and BV contribute to well-being via two mechanisms. The first mechanism proposes that AV and BV facilitate the overall satisfaction of autonomy and relatedness needs, and that the satisfaction of perceived
needs promotes subjective well-being. Accordingly, both AV and BV were expected to be positively correlated to Authenticity and Belonging Satisfaction subscales (AS and BS).

Unlike authenticity and belonging, independence and narcissism are not needs which if satisfied lead to a greater sense of human well-being. While independence and narcissism are independent constructs, they are both argued to represent ego-defensive values (IV and NV) rather than salutogenic (satisfying) values (AV and BV). They may emerge from lack of salutogenic need satisfaction (AS and BS), and also may block attempts to satisfy salutogenic needs. It was predicted that independence and narcissistic values (IV and NV) would be more strongly positively related to each other than to AV and BV, and, unlike AV and BV, NV and IV would overall be negatively correlated with all INS interpersonal need satisfaction subscales.

To test the above hypotheses, the INS subscales were intercorrelated. The correlation matrix is presented in Table 6.4 below.
Table 6.4

_Correlations between INS Values and Satisfaction Subscales._

<table>
<thead>
<tr>
<th>INS Value Subscale</th>
<th>Authenticity Satisfaction</th>
<th>Belonging Satisfaction</th>
<th>Independence Satisfaction</th>
<th>Narcissistic Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authenticity Value</td>
<td>.24**</td>
<td>.18**</td>
<td>.22**</td>
<td>.14*</td>
</tr>
<tr>
<td>Belonging Value</td>
<td>.28**</td>
<td>.22**</td>
<td>.24**</td>
<td>.18**</td>
</tr>
<tr>
<td>Independence Value</td>
<td>-.16**</td>
<td>-.13*</td>
<td>-.13*</td>
<td>-.11*</td>
</tr>
<tr>
<td>Narcissistic Value</td>
<td>-.27**</td>
<td>-.29**</td>
<td>-.30**</td>
<td>-.24**</td>
</tr>
</tbody>
</table>

*Note
N = 248
*Correlation is significant at the .05 level
**Correlation is significant at the .01 level

As expected, Table 6.4 shows that AV and BV were both positively related to satisfaction for each INS Satisfaction subscale. In contrast, IV and NV were negatively related to all INS satisfaction scores. NV was moderately negatively related to each INS Satisfaction subscale, while the negative relationships between IV and each INS satisfaction subscale were weak. These results indicate that AV and BV are positively related to higher satisfaction of interpersonal needs, in contrast to IV and NV which are associated with lower satisfaction of interpersonal needs. It appears that AV and BV, perhaps by neutralising perceptions of coercion and competitiveness from others, contribute to perceived satisfaction with independence and self-serving aspects of interpersonal interactions also.

(All correlations are significant).
6.4.5 Interpersonal values and self-concept

Validity for the INS is next tested by correlating INS value subscales with self-concept measures. Self-concept is defined as a cognitive construct that reflects the way one sees oneself. Social cognitive theory suggests that self-concept broadly constrains human behaviour, and comprises perceived needs, motives and values, amongst other self-schemata. This leads to the expectation that values concerning relationships with others are related to the make-up of self-concept, including such self-aspects as perceived separateness from others (independence), or closeness to others (interrelatedness).

The results of the factor analysis for the INS show that autonomy and relatedness items combine to form two distinct factors, named Authenticity Value (AV) and Belonging Value (BV). Therefore, it was predicted that both AV and BV would be positively related to a measure of autonomous self-concept as represented by the Self-Determination Scale (SDS). Likewise, both AV and BV are expected to be positively related to a measure of interrelated self-concept, namely the Relational Interdependent Self Concept scale (RISC).

The current study also attempted to replicate the distinction made between autonomy and reactive independence found in previous research. It was expected that, unlike AV or BV, values for independence (IV) would be unrelated to autonomous or interrelated self-concept, and positively related to a measure of ego-defensive independence, as represented by the Autonomy subscale of the Adjective Checklist (ACL-A). Independence has previously been argued to be related to self-sufficiency. The current study challenges this, proposing that while autonomy values support self-
sufficiency, independence values compromise autonomy, and are based on ego-
defensiveness rather than genuine self-sufficiency.

Narcissistic values are also argued to undermine self-sufficiency via the covert
dependence on others to foster a sense of self-worth. Accordingly, AV scores were
expected to be positively correlated with self-sufficiency, as measured by the Self-
Sufficiency subscale of the Narcissistic Personality Inventory (NPI-Ss), while both IV
and NV were expected to be negatively correlated with self-sufficiency. Furthermore,
given the covert dependence on others for self-worth implied in narcissism, NV scores
were expected to positively correlate with a sense of entitlement, measured by the
Entitlement subscale from the Narcissistic Personality Inventory (NPI-En).

Table 6.5

*Correlation is significant at the .05 level
**Correlation is significant at the .01 level
The predictions for the relationships between INS Value subscales and other variables were largely supported, with the exception of the lack of expected correlations between IV and the ACL-A. Both AV and BV were positively correlated with the Self-Determination Scale (SDS) and the Relational-Interdependent Self-Concept scale (RISC). AV had the stronger correlation with SDS scores, and BV had the stronger correlation with RISC scores. This suggests that the cognitive, internalised aspect of autonomy and relatedness; Authenticity, represents a closer relationship to self-determination, or the autonomy as defined by Deci and Ryan (2000) compared to the behavioural aspect of autonomy and relatedness; Belonging. Belonging appears to more closely reflect relatedness as defined by Deci and Ryan. These results provide further support for the evidence that autonomy and relatedness values are closely connected. In sum, autonomy appears to represent the cognitive aspect of both values, while relatedness represents the behavioural aspect of both values. These results lead to the final interpretation of the Authenticity subscale of the INS as chiefly representing autonomy, and the Belonging subscale as representing relatedness, inasmuch as they can be distinguished. As predicted, both AV and BV were positively correlated with Narcissistic Personality Inventory Self-sufficiency (NPI-Ss) scores.

As expected, the relationships between both IV and NV scores with the autonomous and related self-concept measures were negligible. Unexpectedly, IV scores were uncorrelated with independent self-concept. As expected, NV was negatively correlated with the NPI-Ss and positively correlated to Narcissistic Personality Inventory Entitlement (NPI-En) scores. IV scores were uncorrelated with the NPI-Ss, but positively related to the NPI-En. These results suggest that independence needs do not support self-
sufficiency, but that on the contrary they may be linked to covert dependence on others. These results support the argument that values for independence are ego-defensive rather than truly autonomous.

Overall, these results suggest that values that facilitate positive self-other interactions and need satisfaction (AV and BV) are related to the autonomous and relational self-concept. Values for admiration from others (NV) tend to undermine self-sufficiency and are related to a sense of entitlement, suggesting that NV is related to the negative aspects of narcissism. The lack of relationship between IV and independent self-concept (ACL-A) may be explained by the lack of correlation between Independence Values and Independence Satisfaction (see Table 6.4). In other words, perhaps because independence values tend to go unsatisfied, valuing independence may be linked to the perception of self as not being very independent.

6.4.6 INS values and psychological and interpersonal well-being

The present study proposes that AV and BV contribute to well-being via two mechanisms. The first, explored above, proposes that authenticity and belonging values tend to be inherently satisfying, and facilitate the satisfaction of interpersonal needs, creating interpersonal well-being. The second mechanism proposes that authenticity and belonging values are salutogenic in themselves. AV and BV represent an awareness of and value for self-other perceptions and behaviours that should support both self-esteem and positive social interactions. It follows that values for authenticity and belonging protect against ego-defensive perceptions and behaviours (represented by IV and NV) which may compromise psychological and social well-being. Accordingly, self-esteem,
measured with the Rosenberg Self-Esteem Scale (SES) was expected to positively correlate with both AV and BV, while alienation, measured with the Alienation Test (AT) was expected to negatively correlate with AV and BV. Furthermore, it was predicted that there would be a negative relationship between both AV and BV, and a broad measure of psychological distress, the Depression Anxiety Stress inventory (DASS:21). Conversely, it was expected that IV and NV would be uncorrelated with self-esteem, and positively correlated with alienation and DASS:21 scores.

Finally, it was expected that values for belonging with others (BV) and for being one’s true self around others (AV) would be positively related to the reported number of friends and the amount of time spent socialising with friends (these variables are measured with items from the demographic section of the questionnaire: see Method section). Conversely, the value for independence from others (IV) was expected to be negatively related to the reported number of friends and to the amount of time spent socialising with friends. Finally, given the argument that narcissistic behaviour can repel others (Morf & Rhodewalt, 2001; Paulhus 1998) the value for narcissistic appreciation from others (NV) was also predicted to be negatively related to the number of close friends and to the amount of time spent socialising with friends. Correlations between INS Value subscales and self-concept measures are presented in Table 4 below.

To test the above hypotheses, each INS value subscale was correlated with the three well-being variables described above, and the items measuring number of friends and hours spent socialising. The results are shown in Table 6.6 below.
Table 6.6

*Correlations between INS Values and Well-being Indicators*

<table>
<thead>
<tr>
<th>Well-being variables</th>
<th>Authenticity Value</th>
<th>Belonging Value</th>
<th>Independence Value</th>
<th>Narcissistic Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Esteem</td>
<td>.19**</td>
<td>.23**</td>
<td>-.09</td>
<td>-.17**</td>
</tr>
<tr>
<td>DAS Total</td>
<td>-.20**</td>
<td>-.21**</td>
<td>.20**</td>
<td>.24**</td>
</tr>
<tr>
<td>Alienation</td>
<td>-.27**</td>
<td>-.33**</td>
<td>.28**</td>
<td>.22**</td>
</tr>
<tr>
<td>No. of friends</td>
<td>0.19**</td>
<td>0.34**</td>
<td>-0.12</td>
<td>-0.23**</td>
</tr>
<tr>
<td>Hrs. socialising</td>
<td>0.12</td>
<td>0.28**</td>
<td>0.02</td>
<td>-0.09</td>
</tr>
</tbody>
</table>

Note

N = 248

* Correlation is significant at the .05 level
** Correlation is significant at the .01 level

As expected, values for AV and BV were positively correlated with self-esteem scores, and negatively correlated with alienation and DAS total scores. The inverse pattern is seen for IV and NV. All correlations were weak to moderate and significant, with the exception of those between IV, and self-esteem scores, which was virtually non-existent. Finally, both AV and BV were positively related to the reported number of friends, and BV was also positively related to amount of hours spent socialising with friends. This gives further evidence that BV represents the behavioural aspect of autonomy and relatedness. NV was negatively related to number of friends, but unexpectedly IV was unrelated to both number of friends and amount of time spent socialising. Overall, these findings support the argument that AV and BV are salutogenic.
values that support psychological and social well-being, in contrast to IV and NV which are associated with compromised well-being.

6.5 Summary of Results for Study 1

The results of the factor analysis depart slightly from the expectation that autonomy values are correlated but distinct from relatedness values, however previous research has suggested that these two values or needs are complementary. In light of this suggestion, it is not surprising that there should be some crossover between autonomy and relatedness items. Raw correlations show that AV and BV are more strongly positively related to each other than to IV or NV, providing further evidence that AV and BV are complementary values. The Authenticity factor appears to represent the cognitive aspect of autonomy and relatedness values, while the Belonging factor appears to represent the social behaviours associated with autonomy and relatedness values. These results reflect the definition of autonomy as the awareness of acting according to internalised values, and of relatedness as involving cognitions and behaviours that support relationships with others. These results, taken together with the strength of correlations between AV and autonomous self-concept, and between BV and interrelated self-concept, lead to the interpretation of the Authenticity subscale of the INS as primarily representing autonomy values, and the Belonging subscale as primarily representing relatedness values, inasmuch as these two complementary values can be distinguished.

The factor analysis also revealed that, for the present sample, there is overlap between values for being independent of others, and for being free from control and
restrictions of others. Items representing these needs combined to form a distinct factor named "Independence". While these results are against expectations that control and independence would be separate factors, the results do support previous suggestions that, unlike autonomy values, independence values involve ego-defensive motives such as the perceived need to be free from others' control. Some control items, those reflective of defence of social status, also loaded onto the narcissism factor, giving support to the argument that narcissistic values are also ego-defensive. The finding that IV and NV are more strongly positively related to each other than to AV or BV lends further support to the argument that IV and NV share a theme of ego-defensiveness.

AV and BV are positively related to both autonomous and interrelated self-concepts, indicating that they support the construction of an autonomous and related self. Positive correlations with INS Need Satisfaction subscales and with well-being variables suggest that AV and BV are salutogenic values and support overall interpersonal need satisfaction. Overall, AV and BV appear to support the construction of both autonomous and related self-concept and well-being, as predicted by the self-constructive model of human nature. In contrast, IV and NV are virtually uncorrelated with self-concept measures, and are associated with compromised well-being and poor overall need satisfaction. These results support the argument that IV and NV represent self-serving and unsatisfying needs, which do not contribute either to a sense of self or to well-being.

In all, these results closely support predictions and provide strong support for the validity of the Interpersonal Needs Scale based on four dimensions of interpersonal values: the two salutogenic values of Authenticity and Belonging, and the two substitute values of Independence and Narcissism.
CHAPTER 7

AIMS AND HYPOTHESES FOR STUDY 2

7.1 Introduction

In brief, Chapter 6 detailed the evidence that, as expected, salutogenic needs were found to be positively related to each other, and to perceived satisfaction, while ego-defensive needs for control, independence and narcissism were found to be positively related to each other and negatively related to need satisfaction. However, as with any study of individual differences and subjective perceptions (Pyszczynski, Greenberg & Solomon, 2000) it was expected that there would be variations on these overall need dynamics (Andersen, Chen & Carter, 2000). For example, considering the whole sample, salutogenic needs tended to be satisfied, however it may be that some participants who reported high values for salutogenic needs also perceive that these needs are not fully satisfied. Similarly, while ego-defensive needs tend to be unsatisfied, it is likely that some participants report satisfaction of these needs. The central aims of the present study therefore included investigating whether unsatisfied salutogenic values contribute to well-being, and whether satisfied ego-defensive needs compromise well-being. In order to address these questions it was necessary to identify participants who showed distinct profiles in terms of both the values they hold and the degree to which these values are satisfied or not.

In addition, with four proposed needs and four measures of need satisfaction, the number of variables to be considered and the complexity of relationships of variables to each other is great. The expectation of very complex patterns of individual differences across the interpersonal need variables, and the need to identify participants with
unsatisfied salutogenic values or satisfied ego-defensive needs, suggests two conceptual and methodological constraints for the organisation and interpretation of data. Firstly, participants should be statistically categorised according to differences in their patterns of need dynamics, and secondly that hypotheses based on these categories be exploratory and speculative. Taking the reviewed research and theory and the empirical evidence from Study I, it was expected that the sample could be divided into discrete groups according to differences in relative strengths of the four interpersonal values, and the perceived satisfaction of corresponding needs. The present study tentatively predicts the presence of five distinct groups according to patterns of need dynamics, which are now detailed.

7.2 Expected Groups based on Need Dynamics

Study I found that autonomy and relatedness values, represented by INS Authenticity and Belonging Values, were found to be more strongly positively related to each other than to ego-defensive needs, and to be positively related to satisfaction of all interpersonal needs. Based on these correlations, it was expected that there would be a group of participants who report higher values for authenticity and belonging compared to values for independence and narcissistic affirmation from others, and who also report satisfaction of their authenticity and belonging needs. Because needs concerning self-expression and integration with others are valued equally, this group is described as the Self-other Balanced group.

It is probable that not all of those participants who value both authenticity and belonging highly, and more than independence and narcissistic needs, also perceive that
authenticity and belonging needs are completely satisfied. It was therefore expected that there would be a group of participants who would show a discrepancy between their high values for authenticity and belonging highly, and their perceived satisfaction of these needs, resulting in a degree of authenticity and belonging neediness. Accordingly, this group could be named the Slightly Needy group. Ego-defensive needs have been argued to emerge either from failure to satisfy salutogenic needs (Ryan, 1995), or from the adoption of ego-defensive values (Kasser, 2001; Sheldon et al, 2001). For the Slightly Needy group, ego-defensive values can be considered to be substitutes for highly valued but unsatisfied salutogenic needs. Therefore, the Slightly Needy group were expected to have slightly higher values for ego-defensive needs (independence and narcissism) compared to the Self-other Balanced group.

Study 1 also found that overall, ego-defensive needs were positively related to each other, and to poor satisfaction of all interpersonal needs. It was therefore expected that there would be a group reporting comparatively high values for independence and narcissism, and poor satisfaction of all interpersonal needs. This group could be described as the Needy Narcissist group (to distinguish them from the Individualist group described below). Given earlier results, the ego-defensive needs of Needy Narcissists may result from either from failure to satisfy salutogenic needs, and/or from the adoption of ego-defensive values.

Based on previous speculation that narcissistic needs may be (perhaps temporarily) satisfied, it is probable that some participants who report comparatively high values for narcissistic needs also perceive these needs to be largely satisfied. This group represents the Satisfied Narcissists. Furthermore, given that "positive" or satisfied
narcissists describe themselves as independent, superior and self-sufficient (Gaertner et al, 2002; Rhodewalt & Morf, 1995), it is probable that Satisfied Narcissists perceive that their independence needs are also satisfied. The ego-defensive needs of Satisfied Narcissists are speculated to emerge from the adoption of relatively high ego-defensive values. However, given that valuing ego-defensive needs is argued to undermine salutogenic need satisfaction, it was also expected that Satisfied Narcissists would report some discrepancy between authenticity and belonging values and the satisfaction of these needs.

Researchers have stated that independence values are incompatable with perceived needs for relatedness with others (Deci & Ryan, 2002, 2000; Koestner & Losier, 1996; Ryan & Lynch, 1989). Narcissistic values, however, do include perceived needs for relatedness, in that they include values for the admiration of others. Therefore, despite the finding that overall, ego-defensive narcissistic and independence needs were positively related, a group espousing strong independence values, but not narcissistic or belonging values, may be identified. This group is best described as the Individualists. Previous research, and the results of Study I, suggest that on average ego-defensive independence needs are unlikely to be satisfied. Therefore, it was expected that this group would report that these needs are not fully satisfied. As ego-defensive needs, they were also expected to undermine the satisfaction of authenticity needs, resulting in authenticity neediness. However, given that for Individualists, values for narcissistic affirmation and belonging were expected to be low, it was expected that there would be no perceived belonging or narcissistic neediness.
Finally, there may be a group who report higher values for Independence compared to Belonging Values, but unlike the Individualist group described above, also report satisfaction of their independence needs. However, there is a lack of evidence to support this probability. Previous research linking individualism with well-being may suggest the existence of persons who prioritise independence values over interdependence values, and presumably also have satisfied independence needs to support their well-being. However, the current study takes the view that such research may have confounded ego-defensive independence with salutogenic autonomy. Therefore, the current study viewed the existence of a group of satisfied Individualists, where individualism is defined as valuing independence but not belonging, to be unlikely. Note that this does not preclude the expectation of satisfied independence needs for the Satisfied Narcissist and Self-other Balanced groups as described above.

The expected results for interpersonal values and need satisfaction for each group are presented in Table 7.1 below.
Table 7.1

Summary of Main Predictions for Interpersonal Values and Need Satisfaction for each Expected Group.

<table>
<thead>
<tr>
<th>Group</th>
<th>Value Ranking</th>
<th>Need Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-other Balanced</td>
<td>Salutogenic needs valued equally and greater than ego-defensive needs</td>
<td>All interpersonal needs satisfied</td>
</tr>
<tr>
<td>Slightly Needy</td>
<td>Salutogenic needs valued equally and greater than ego-defensive needs</td>
<td>Unsatisfied Authenticity and Belonging needs</td>
</tr>
<tr>
<td>Satisfied Narcissists</td>
<td>Ego-defensive values greater than Self-other Balanced and Slightly Needy groups</td>
<td>Satisfied ego-defensive needs</td>
</tr>
<tr>
<td>Needy Narcissists</td>
<td>Ego-defensive values greater than Self-other Balanced and Slightly Needy groups</td>
<td>Unsatisfied ego-defensive needs</td>
</tr>
<tr>
<td>Individualists</td>
<td>Independence needs greater than other needs, low values for Belonging</td>
<td>Unsatisfied Independence and Authenticity needs</td>
</tr>
</tbody>
</table>

7.3 Need Dynamics and Self-Concept

Self-determination Theory argues for the internalisation of both autonomous and relatedness values as components of self-determination (Ryan, 1995) but has been criticized for neglecting the interpersonal aspects of self (Andersen, Buunk & Aukje, 2000; Chen & Carter, 2000; Cross, Morris & Gore, 2002). In the interests of exploring conceptions of human nature tied to perceived needs for well-being, the present study introduces the relational-interdependent self-concept into the study of salutogenic need satisfaction.
Adopting the bottom-up organismic view that only satisfied autonomy and relatedness needs support self-determination and social integration, SOT researchers have also speculated that salutogenic values themselves may support self-determination. Study I found that authenticity values and belonging values were both positively related to self-determination and to a relational-interdependent self-concept, and it was further speculated that if perceived needs are satisfied, their association with self-concept is stronger. Furthermore, given the evidence that salutogenic values are complementary and that they are associated with both the self-determined self and the relational-interdependent self (see Study I), it was predicted that the self-determined self and the relational-interdependent self would co-exist within the make-up of self-concept for those who value salutogenic needs and have these needs satisfied.

With regards to the discrete groups detailed previously, it was expected that those who report equal valuing of, and satisfaction of salutogenic needs, the Self-other Balanced group, would describe themselves as both self-determined and interdependent in terms of self-concept. The Slightly Needy group, who report equal valuing of salutogenic needs, but some salutogenic neediness, were also expected to describe themselves as both self-determined and interrelated, but to a lesser extent compared to the first group. Both groups were expected to report comparatively lower mean independent-self scores.

With regards the narcissistic components of self-concept, the present study speculates that the positive aspects of narcissism, such as self-sufficiency and authority (Emmons, 1987; Raskin & Terry, 1988) may be supported either by satisfied narcissistic
needs, or by satisfied salutogenic needs. The results of Study I provided initial support for the latter argument, finding a positive correlation between salutogenic values and self-sufficiency. Therefore, it was predicted that the Self-other Balanced group would report high levels of self-sufficiency and authority as measured by the Narcissistic Personality Inventory (NPI). No specific hypotheses were suggested by previous research or theory regarding the self-sufficiency or authority for Slightly Needy participants.

Study I found that ego-defensive values and self-concept measures were virtually uncorrelated. However, given the argument that satisfied ego-defensive needs may support an independent self-concept, it was predicted that the Satisfied Narcissist group would report a stronger independent self-concept compared to the Self-other Balanced, Slightly Needy, and Needy Narcissist groups. It was predicted that Needy Narcissists, who were expected to report unsatisfied needs, would also report low scores for each self-concept measure compared to other groups. However, given their relatively high ego-defensive values, they were expected to report a stronger independent self-concept on average compared to the Self-other Balanced and Slightly Needy groups.

Study I found that independence values were positively correlated with narcissistic entitlement and uncorrelated with self-sufficiency. Narcissistic values were also found to be positively correlated with entitlement, but negatively correlated with self-sufficiency. The present study speculates that satisfied narcissistic needs may reflect the positive aspects of narcissism, while unsatisfied narcissistic needs reflect the negative aspects. Therefore, it was expected that the satisfied ego-defensive needs of the Satisfied Narcissists would reflect narcissistic self-sufficiency and authority, but not entitlement and exploitation. It was further speculated that those whose narcissistic needs were not
satisfied, the Needy Narcissists, would show the opposite pattern of results to Satisfied Narcissists for the narcissistic subscales. In other words, due to a perceived lack of need fulfillment, Needy Narcissists were expected to report a sense of entitlement and readiness to exploit others, perhaps in a self-defeating attempt to have needs met.

Individualists were expected to report unsatisfied independence and authenticity needs, resulting in low mean autonomous- and independent-self scores. Given their expected low value for belonging, Individualists were also expected to have the lowest scores on average compared to other groups for relational-interdependent self-concept. Finally, based on the findings of Study 1 that independence values were positively related to narcissistic entitlement, suggesting covert needs regarding others, and also the expectation of unsatisfied ego-defensive needs of Individualists, it was further speculated that Individualists would also have comparatively high narcissistic entitlement and exploitative scores on average. Contrary to lay assumptions regarding the relationship between independence values, self-sufficiency and authority, it was expected that Individualists would report low self-sufficiency and authority scores on average.

4.4 Need Dynamics and Well-Being

The central premise of SDT is that satisfied needs for autonomy and relatedness are important for psychological growth, emotional and social integration, and positive functioning in a number of domains including familial, social, educational, and occupational (reviewed in Deci & Ryan, 2002). In the last decade, research attention has turned towards relationships between values and well-being (Kasser, 2002). By considering both the strength of values for different types of needs, and perceptions of
need satisfaction, the present study aims to find evidence that autonomy and relatedness are complementary and salutogenic values, and that perceived dissatisfaction of these needs and valuing of substitute needs is linked to compromised well-being, regardless of fit with self-concept.

The present study speculates that valuing salutogenic interpersonal needs may contribute to well-being, even if these needs are not fully satisfied. In contrast, valuing ego-defensive needs is an indicator of psychological distress or dysfunction, even if these needs are fully satisfied. Considering the possible combinations and outcomes of valued interpersonal needs and need-satisfaction discrepancies represented by the five groups described above, a broad continuum for potential well-being is proposed.

In the optimal position for well-being, the Self-other Balanced group, salutogenic needs are valued highly, and are fully satisfied, while ego-defensive needs are given less value and are also satisfied. The second level down, the Slightly Needy group, is identical to the first level in terms of the ranking of interpersonal needs, except that salutogenic needs are not being fully satisfied. At this level, ego-defensive needs were expected to be slightly greater than at the first level.

At the third level, the Satisfied Narcissists, ego-defensive needs assume greater value compared to the Self-other Balanced and Slightly Needy groups, yet are being currently satisfied. Psychological well-being in terms of self-esteem was expected to be high for Satisfied Narcissists, yet linked to narcissism, while well-being was expected to be otherwise impaired. The lowest levels, the least optimal positions for well-being, include those who value ego-defensive needs relatively highly and whose overall needs
are not being satisfied (Needy Narcissists), and those whose needs for independence are not satisfied and who fail to value belonging needs: the Individualists.

### 7.4.1 Alienation

Like narcissism, alienation has been argued to be a product of individualistic Western culture. Individualistic values, such as separateness and independence, are thought to promote alienation and even contribute to increasing rates of youth suicide (Eckersley & Dear, 2002). Research using the Alienation Test shows that alienation is linked broadly to psychological dysfunction (Ganellen & Blaney, 1984; Kobasa, 1979; Kobasa, Maddi & Kahn, 1980; Maddi, 1998). To date, the relationship of needs for wellbeing, or conversely substitute needs, with alienation has not been explored. Given that the present study focuses on outcomes relating to need dynamics in the interpersonal domain, alienation from others and from society seem useful variables to consider.

With regards to substitute needs: valuing independence, as defined by SDT researchers, seems an obvious link to alienation from others and society. The present study also speculates that narcissistic needs are also linked to alienation from others, given that narcissism involves the devaluation of others through self-enhancement, exploitation and entitlement.

With regards to relatedness needs, alienation seems a likely outcome for failure to satisfy needs for relatedness in terms of lack of social connection. Therefore, unsatisfied relatedness needs (relatedness neediness) may be linked to alienation. However, the present study speculates that alienation from others may be more strongly linked to a lack of perceived value for relatedness, in terms of the lack of valuing of others as one’s equals or as sources of support. This formulation is in line with the definition of
alienation given by Maddi and Kobasa (1979, 1982), who identify the cynical, nihilistic and anti-social attitudes in alienation. In sum, alienation from others may be the outcome for those people who report little need of others.

One aspect of alienation, alienation from self, taps the degree to which people view the self as worthy of introspection as a source of values, worth and meaning (Robinson, Shaver & Wrightsman, 1991). Alienation from self appears to be antagonistic to autonomy, particularly in terms of the internalisation of social values and emotional integration. These aspects of autonomy are thought to enable people to act choicefully according to their awareness of their personal values. Therefore, the present study speculates that lack of satisfaction of autonomy needs may be implicated in alienation from the self, and that conversely, valuing independence needs may be associated with alienation from self.

It was expected that people who report strong values for, and satisfaction of salutogenic needs, would report the lowest levels of alienation. The other groups were expected to report increasing levels of alienation according to the overall hypothesis of the well-being continuum based on need dynamics.

7.4.2 Self-esteem

SDT focuses attention on the unifying and integrating processes of the self as being salient to the creation of human well-being. These processes support a sense of identity, self-awareness, and internal locus of control. When self-determination is combined with satisfaction of the need for relatedness, involving receptivity to social feedback regarding autonomous actions, a genuine and robust sense of self-worth can
emerge (Deci & Ryan, 1995; Ryan & Brown, 2003). Supported by satisfaction of autonomy and relatedness needs, self-knowledge and self-worth is neither independent of, nor dependent on, other's evaluations of the self. This conception of self-worth derives from the humanistic tradition that defines self-worth as self-acceptance and the equal valuing of self and others (e.g. Rogers, 1959), and links self-worth with a wide range of psychological health indices. People with good self-esteem do not need to live up to standards or compare themselves favourably with others to maintain their self-worth (Rosenberg, 1965).

In contrast to this conception of self-worth, other researchers have identified a type of self-esteem that is contingent on meeting certain standards, sometimes by employing self-enhancement, self-deception, and other ego-defensive strategies (Crocker, Thompson, McGraw & Ingermane, 1987; Fitch, 1970; Tice, 1991). It has even been suggested that high self-esteem merely represents an aggressively self-enhancing or narcissistic interpersonal style (Baumeister, Tice, & Hutton, 1989). However, despite increasing interest in defensive self-esteem, empirical research into this phenomena remains limited (Kernis & Paradise, 2002). Most studies have focused on self-esteem stability to distinguish between secure and fragile self-esteem, arguing that because fragile self-esteem is contingent upon meeting standards and validation from others, it will fluctuate more than will self-esteem based on self-acceptance and equality with others. Results indicate that unstable self-esteem is linked to poor coping with negative events, anger towards threats to self-worth, perceptions of external control, and poor self-concept clarity (for a review, see Kernis & Paradise). Unsurprisingly, unstable self-
Esteem has also been linked to poorer psychological well-being relative to stable self-esteem (Paradise & Kemis, 1999).

Self-determination theory recognises both secure self-esteem, based on basic need satisfaction, and contingent or fragile self-esteem, based on a need for continual validation from self and others (Deci & Ryan, 1995). Yet, to the author’s knowledge, only one study has examined the relationships between autonomous self-regulation, and fragile versus secure self-esteem. This study found that the more unstable people’s self-esteem, the less autonomous was their self-regulatory style with regards personal goals (Kemis et al., 2000). The relationships between salutogenic need satisfaction, defensive needs, and secure versus fragile self-esteem have not been investigated.

Given that secure self-worth is argued to emerge naturally via satisfaction of salutogenic needs, and that ego-defensive needs interfere with the satisfaction of salutogenic needs, it is proposed that ego-defensive needs, such as the need for self-enhancement, are linked with fragile self-esteem. This proposal is supported by the insight into self-enhancement and self-esteem processes provided by researchers of narcissism. To recap, narcissism is thought to involve dysfunctional self-esteem regulation, whereby narcissists attempt to coerce admiration from others, and engage in a number of defensive strategies when this fails. Fragile self-esteem is therefore conceptually similar to narcissism, and may represent the outcome of attempts to satisfy the ego-defensive need for self-enhancement.

With regards needs for independence, while self-esteem has been identified as a strongly-held value in individualistic cultures, it has also been argued that independence values undermine the equality of self with others that comprise genuine self-esteem as
defined by Rosenberg (1963) and Rogers (1959). Social researchers have pointed out that
the independent self requires high self-esteem to function, but individualistic societies are
argued to perpetuate a sense of external control and defensiveness, reinforcing self-
evaluations based on competitiveness, and undermining the social conditions that support
inherent self-worth (Eckersley & Dear, 2002).

The current study attempts to distinguish between fragile and secure self-esteem
by investigating differences in perceived interpersonal needs and their satisfaction, and
their relationship with self-esteem. It was expected that those who value narcissistic
needs and have these needs satisfied will report high self-esteem, however it was also
expected that their self-esteem would be reduced when the inflationary effect of
narcissism on self-esteem is controlled for. People who report strong values for and
satisfaction of salutogenic needs, were also expected to report high self-esteem, but it was
expected that their self-esteem would be unaffected by the self-enhancement effects of
narcissism on self-esteem. The other groups were expected to report decreasing levels of
self-esteem according to the overall hypothesis of the well-being continuum based on
need dynamics (see section 4.4).

7.4.3 Depression, Anxiety and Stress

Kasser and Ryan (1996) demonstrated that people who reported high ratings for
intrinsic values reported less depression compared to those who reported high ratings for
extrinsic values. To replicate and extend these findings, the present study uses a measure
indicating levels of broad psychological distress and dysfunction: the Depression,
Anxiety and Stress Scale, short form (DASS:21, Lovibond & Lovibond; 1995) to tap
differences in distress and dysfunction between the groups described previously. The DASS:21 assesses levels of depression including low mood and sense of meaninglessness, physical arousal associated with anxiety, and tension and agitation associated with stress (Lovibond & Lovibond) giving a broad indication of general functioning. It was expected that people who report strong values for, and satisfaction of salutogenic needs, would report the lowest levels of depression, anxiety and stress. The other groups were expected to report increasing levels of dysfunction and distress according to the overall hypothesis of the well-being continuum based on need dynamics (see section 4.4).

7.4.4 Social anxiety

The sample for the present study includes 82 respondents (32%) sourced from the internet, who reported a diagnosis of social anxiety or social phobia within the past two years. Major components of social anxiety include fear of negative evaluation from others, social avoidance, and anxiety in social situations. In terms of the current study, fear of negative evaluation may reflect an unsatisfied need for positive evaluation or appreciation from others. This may lead to anxiety and apprehension of failure to satisfy needs. The social avoidance caused by anxiety suggests limited interpersonal interactions, further undermining opportunities for satisfying interpersonal needs overall. For these reasons, it was expected that the Needy Narcissist group, with highly valued but unsatisfied ego-defensive needs, and unsatisfied interpersonal needs overall, would have the greatest proportion of respondents with a diagnosis of social anxiety. In contrast, unfulfilled autonomy needs, independence needs or belonging needs alone (including the
Individualist and Slightly Needy groups) were expected to have no relationship to social anxiety. Finally, satisfied authenticity and belonging needs contraindicate interpersonal dysfunction such as social anxiety, while satisfied needs for appreciation from others (narcissistic needs) may also preclude social anxiety. It was therefore predicted that the Self-other Balanced and Satisfied Narcissist groups would have a significantly less than average proportion of respondents with social anxiety.

7.5 Summary of Aims and Hypotheses

The present study emphasizes the importance of exploring what humans are, when making claims as to what is healthy for humans. According to a social-cognitive model of human nature, the self is argued to be created largely according to social context or perceptions of self-other relationships. Needs for positive functioning are derived from self-concept, which is in turn derived from social context. According to self-determination theory and the organismic/dialectical view of human nature, there are universal needs for well-being, and social context may support or hinder well-being.

The present study aims to explore cognitive aspects of salutogenic and ego-defensive need dynamics, utilising the domain of interpersonal interactions, in order to address the broad research questions detailed previously, including: Does well-being depend on fit between self-concept, values, and need satisfaction? Or are there universal needs that must be satisfied for well-being? Overall, it was expected that results would support the hypothesis that peoples' places on the well-being continuum, including levels of self-esteem, alienation and psychological distress, is determined by their patterns of perceptions of needs and need satisfaction. Those who report strong values for, and
satisfaction of salutogenic needs, were expected to report the greatest well-being. The greater the degree to which ego-defensive needs are valued, and the less perceived needs are satisfied, the more well-being was expected to be compromised.
CHAPTER 8

RESULTS FOR STUDY 2

8.1 Introduction

The present study emphasizes the importance of exploring what humans are, when making claims as to what is healthy for humans. The organismic model of human beings proposes that all people have certain needs that must be satisfied for well-being (salutogenic needs). In contrast, the social-cognitive model of human nature proposes that needs for well-being may be related to the self-concept, which in turn is argued to be created largely according to perceptions of self-other relationships (e.g. social environment, culture). The present study considers needs and need satisfaction in terms of what is valued, and what is gained or lacking (respectively) in interpersonal interactions. These interpersonal need dynamics are argued to support or hinder global psychological well-being. The present study aims to investigate the nature of these relationships.

Study 2 builds on the results of Study 1 and further unpacks the relationships between interpersonal values, need satisfaction and well-being. Initially in this chapter, the dynamics of interpersonal values and need satisfaction were examined, by grouping cases according to similarities in INS Value and Need Satisfaction subscale mean scores. These groups were identified and defined according to their distinct patterns of values and need satisfaction scores. Repeated measures and multivariate analyses of variance were then used to explore qualitative differences in self-concept and well-being, according to the different dynamics of interpersonal needs between the distinct groups.
SPSS version 12 software was used for the statistical analysis. Because data collection for Studies 1 and 2 occurred concurrently, Chapter 5 discusses the method and procedures for both. Likewise, data screening and descriptive statistics for the following measures are reported previously (see section 6.4.1, and Table 6.2).

8.2 Predicted Groups

It is assumed that individuals value multiple interpersonal needs, and the measure of interpersonal values and needs (INS) developed and validated for the present research was intended to capture the composition of multiple values and need satisfaction reported by participants. Based on proposed patterns of need value and need satisfaction scores (outlined below), it was argued that the sample can be divided into qualitatively distinct groups for further, more detailed analysis of within-group characteristics and between-group differences in psychological and social well-being. These groups were described as the Self-other Balanced group, the Slightly Needy group, the Satisfied and Unsatisfied Narcissists, and the Individualists.

The proposed groups are described below in terms of specific predictions for the within-group and between-group characteristics of need value and need satisfaction scores. These groups are used as the basis for subsequent hypotheses concerning self-concept and well-being.

8.2.1 Self-other Balanced

The current study argues that Authenticity Values (AV) and Belonging Values (BV) complement each other, and that when these salutogenic needs are both highly valued and satisfied, ego-defensive needs are valued less. Furthermore, it is proposed that
overall, salutogenic values tend to be satisfied. The evidence from Study I that AV and BV are correlated with each other and with all INS satisfaction scores provides initial support for these propositions. It was therefore expected that there would be a group of respondents who report high values for both AV and BV, and high scores for all INS satisfaction subscales on average. These participants were expected to report mean AV and BV scores significantly higher than their mean Independence Values (IV) and Narcissistic Values (NV) scores. Perceiving that they are satisfied with the valued aspects of their interpersonal interactions, it was expected that they would report no significant differences between AV and Authenticity Satisfaction (AS), and BV and Belonging Satisfaction (BS). Because there is less perceived need to be independent of others or to be affirmed by others, relative to needs for authenticity and belonging with others, satisfaction with independence and narcissistic needs (IS and NS) was also expected to be high. This group was expected to report significantly higher mean IS and NS scores than IV and NV scores. Overall, this group was expected to report no perceived interpersonal "neediness"; in other words, overall discrepancies between INS values and satisfaction scores were expected to be low compared to groups with other INS score patterns.

8.2.2 Slightly Needy

It is argued that while AV and BV are more likely to be satisfied compared to ego-defensive needs, if these needs are not fully satisfied there may be an increase in ego-defensive needs. To explore this possibility, it was predicted that there would be a group with high mean AV and BV scores, but significantly lower mean AS and BS scores. This group were expected to report AV and BV values significantly greater than their IV and NV scores on average. As their ego-defensive needs are hypothesized to emerge in
response to unsatisfied salutogenic needs, IV and NV scores were expected to be greater compared to the Self-other Balanced group. Finally, given that ego-defensive needs are argued to be unsatisfying substitutes for salutogenic needs, significant discrepancies between ego-defensive needs and need satisfaction were expected.

8.2.3 Satisfied Narcissists

Previous research has suggested that narcissism is an unstable trait with two manifestations depending on the status of the satisfaction of narcissistic needs. Within the present sample, it was expected that there would be both satisfied and unsatisfied narcissists. Therefore, two qualitatively different groups with comparatively high narcissistic values were predicted. It was expected that of those with the highest mean NV scores, there would be some who report that their need for affirmation and superiority is currently satisfied. For these participants, there was expected to be no significant difference between NV and NS. This group is described as the Satisfied Narcissists.

Researchers describe narcissists as perceiving themselves (erroneously) to be independent of others. The current study speculates that this description may be apt for Satisfied Narcissists. Therefore, it was also predicted that Satisfied Narcissists would report high IV and IS scores on average. However, because NV and IV as ego-defensive values are proposed to undermine salutogenic need satisfaction, it was expected that there would be some discrepancy between AV and AS, and between BV and BS. Overall, it was expected that this group would report somewhat greater interpersonal need discrepancies than the Self-other Balanced group.
8.2.4 Needy Narcissists

It was also expected that of those with the highest mean ego-defensive values, there would be some who report that their ego-defensive needs are not satisfied. For these participants, it was expected that there would be large significant differences between NV and NS, and between IV and IS. Like Satisfied Narcissists, the high narcissistic and independence values of Needy Narcissists were expected to undermine salutogenic need satisfaction. Therefore it was expected that there would be large significant discrepancies between AV and AS, and between BV and BS. The overall lack of interpersonal need satisfaction was expected to give this group very high overall neediness compared to other groups.

8.2.5 Individualists

While narcissistic and independence values overlap for some individuals, it was expected that other participants would report little need of others overall, including low narcissistic values for the approval of others. This group, the Individualists, were defined as having significantly higher mean IV and AV scores relative to their mean BV and NV scores, which were expected to be much lower. Previous research suggests that Individualists, here defined as those with low values for relatedness needs and high values for independence needs, are unlikely to have their needs satisfied. This is supported by the results of Study 1 which show that, on average, independence values are virtually uncorrelated with independence need satisfaction. Therefore, independence needs for this group were predicted to be unsatisfied. The present study argues that independence, as an ego-defensive value, would also undermine the satisfaction of autonomy needs. Therefore, it was expected that there would be significant discrepancies
between IV and IS, and between AV and AS. Low mean BV and NV scores indicate that there would be small or no BV/BS or NVINS discrepancies.

See Table 7.1 in the previous chapter for a brief summary of main predictions for each group.

8.3 **Cluster** Analysis

To explore the hypothesis that there would be different patterns of relationships between interpersonal needs based on which needs are more highly valued, and whether they are satisfied, a cluster analysis was performed on mean INS value and satisfaction subscale scores. Cluster analysis is a classification analysis, which groups cases together according to proximities and differences in scores across multiple variables. It is the statistical method of choice for detecting qualitatively distinct groups of cases from a large number of observations (Hair et al, 1998). Ward’s method and squared Euclidean distance procedures were selected for the cluster analysis. Ward’s method is a hierarchical technique that maximizes both within and between groups distances, suitable for an analysis which considers within groups characteristics and between groups differences. The squared Euclidean distance measure is recommended for use with Ward’s method (Hair et al). No specific quantity of expected groups was input into the analysis, to allow the maximum amount of information about the grouping of clusters to be used, and in keeping with the speculative nature of hypotheses regarding the number of resultant groups. Hierarchical cluster analysis produces a graph (the dendrogram) representing the grouping of cases, from which the number of distinct groups can be estimated.
A successful cluster analysis should exhibit high within-group homogeneity, and high between-group heterogeneity (Hair et al). Estimates of within-group homogeneity were tested by comparing resultant groups with the predicted group profiles outlined above, using repeated-measures analysis of variance. Between-group heterogeneity was tested by exploring differences between groups with multivariate analysis of variance.

The initial dendrogram included one case that appeared substantially removed from the rest of the sample: On examination of the data, this case had very low AV and BV scores, and high IV and NV scores. As cluster analysis is sensitive to outliers, this case was excluded. The final cluster analysis produced five clear clusters (see Appendix D for dendrogram). Clusters are presented graphically for ease of interpretation and comparison of INS mean score patterns (see Figure 8.1).

8.4 Within-groups INS Characteristics

Examining the profiles of INS value and need satisfaction scores for each group involves a large number of score comparisons. Therefore, for the sake of simplicity in interpretation and efficiency in analysis, and given that interaction effects are not included in the hypotheses for group profiles, repeated-measures analyses of variance were performed to test for simple-effect differences between INS needs within groups, followed by 2 X 2 ANOVAS to test for need - satisfaction discrepancies between INS values and need satisfaction. Several tests violated the sphericity assumption. This was corrected for by making the degrees of freedom more conservative using the Greenhouse-Geisser correction F. For the sake of consistency, this correction was used for all repeated-measures analyses.
8.4.1 Self-other Balanced (N=42)

This group included those who report roughly equivalent mean AV and BV scores, both of which were higher than mean IV and NV scores. They also reported high satisfaction for INS needs. Mean IS and NS scores were greater than IV and NY scores, suggesting that satisfaction with these aspects of interpersonal interactions was greater than their perceived value. This cluster most closely resembled the predicted "Self-other Balanced" group (see Figure 8.1.1 below). Repeated measures ANOVA, using INS values as independent variables, showed the overall difference in mean INS values for this group was significant: $F(2.52, 103.44) = 138.62, p < .001$, $\eta^2 = .77$. The difference between mean AV and BV scores was significant, with AV slightly higher than BV. Mean AV and BV were significantly higher than IV and NY. Given that the aim of the within-groups analysis of variance was to uncover simple effects only, and for the sake of efficiency, two separate 2 (values) X 2 (satisfaction) mixed-design ANOVAS were performed to test for differences between the INS value and INS need satisfaction scores. The first 2 X 2 ANOVA showed that overall differences between mean AV and BV scores compared to AS and BS scores were significant: $F(2.74, 112.31) = 3.30, p < .05$, $\eta^2 = 0.07$, as were differences between mean IV and NV scores compared to IS and NS scores: $F(2.52, 103.23) = 81.89, p < .001$, $\eta^2 = .67$. (Simple effect data for each INS subscale comparison for each group are given in Tables C1 – C5 in Appendix C.)

In sum, for the Self-other Balanced group, mean AV scores were slightly but significantly greater than mean BV scores, both AV and BV scores were significantly greater than IV scores, and all three were significantly greater compared to NY scores. Mean satisfaction scores were significantly higher than mean value scores (see Figure
8.1.1 below), with the exception of the mean AS score. The mean AS score was slightly lower than the mean AV score, although this difference was not significant. These results offer further support to the argument that autonomy and relatedness needs are complementary and support the satisfaction of interpersonal needs overall.

8.7.2 Slightly Lonely (N=53)

The second group had roughly equivalent mean AV and BV scores, which were slightly higher compared to their mean IV and NV scores. While this pattern for INS values resembles that of the Self-other Balanced group, there were discrepancies between each INS value and satisfaction scores. Mean NV and IV scores for this group were slightly higher compared to the Self-other Balanced group. Cluster 2 resembles the predicted "Slightly Needy" group. Based on the largest value/satisfaction discrepancy evident in this group (Belonging Value - Belonging Satisfaction), it was renamed the "Slightly Lonely" group to more closely represent its characteristics (see Figure 8.1.2 below).

Repeated measures ANOVA found the overall difference between all INS value scores for Slightly Lonely was significant: $F(1.90, 103.55) = 41.81, p < .001, \eta^2 = .44$. Testing for differences between INS values and satisfaction scores, 2 X 2 ANOVAs found that the overall difference between AV and BV compared to AS and BS was significant: $F(2.76, 143.57) = 28.02, p < .000, \eta^2 = .35$, as was the overall difference between IV and IS compared to NV and NS scores: $F(2.07, 107.49) = 68.16, p < 0.001, \eta^2 = .57$. 


In sum, for the Slightly Lonely group, AV and BV scores were significantly greater on average than IV scores, which were in turn significantly higher than mean NV scores. There are significant differences between all interpersonal needs and need satisfaction scores. These results suggest that, as predicted, highly valued but unsatisfied salutogenic values are associated with an increase in ego-defensive values, and also as predicted, ego-defensive values remain unsatisfied.

8.4.3 Satisfied Narcissists (N=45)

For the third group, average AV, BV and IV scores were roughly equivalent, while NV scores were slightly less on average in comparison. However, mean NV scores for this group were higher than every other cluster except Cluster 4 (for between-groups comparisons, see Figure 2). There were small differences between all value scores and satisfaction scores, except for NV and NS scores which were equivalent. Cluster 3 resembles the predicted "Satisfied Narcissist" group (see Figure 8.1.3). This group also reported high IV and high IS scores on average. This finding supports suggestions in previous research that satisfied narcissists may consider themselves to be largely independent of others.

Repeated measures ANOVA for Cluster 3, Satisfied Narcissists, using INS values as the independent variables, revealed an overall significant difference in AV, BV and NV within the Satisfied Narcissists group: \( F(2.78, 122.27) = 19.50, p < .001, \eta^2 = .31 \). To test for differences between the INS value and INS need satisfaction scores, 2 X 2 ANOVAs were performed, both of which found overall significant differences. The first ANOVA tested comparisons between AV and BV, and AS and BS: \( F(2.53, \)
The second 2 X 2 ANOVA tested comparisons between IV and NV, and IS and NS: \( F(2.55, 112.22) = 10.33, p < .001, \eta^2 = 0.19. \)

For Satisfied Narcissists, mean AV and BV scores were both significantly higher compared to mean NV scores, and there were small but significant discrepancies between all INS value/need satisfaction scores, except for NV compared to NS. To explore the difference found between NV and IV mean scores, a post-hoc paired samples t-test was performed. This found that the mean IV score was significantly greater compared to the mean NV score: \( t(44) = 5.63, p > .000. \) Overall, these results support the argument that those with satisfied narcissistic needs also value independence highly, and report that their independence needs are satisfied.

8.4.4 Needy Narcissists (N=81)

Cases grouped into the fourth group had lower mean satisfaction scores than value scores for each interpersonal value, and higher mean NV scores than all other clusters except the "Satisfied Narcissists". On this basis, this group was considered to resemble the "Needy Narcissists" (see Figure 8.1.4 below). The differences between each mean INS value and satisfaction score for Needy Narcissists were large. Like Satisfied Narcissists, this group reported a high mean IV score, but unlike Satisfied Narcissists, Needy Narcissists report a much lower mean IS score. This finding of "independence neediness" supports previous suggestions that unsatisfied narcissists may believe that others are trying to control or manipulate them, implying a defensive need for freedom from others.

Repeated measures ANOVA found that overall differences between types of INS values for Needy Narcissists were significant: \( F(2.2, 217.52) = 37.29, P = .000, \eta^2 = \)
.32. As expected, 2 X 2 ANOVAs found differences between A and B values, and A and B satisfaction scores, were significant overall: $F(2.24,179.03) = 427.70$, $P < .001, \eta^2 = .84$, as were differences between I and N values, and I and N satisfaction scores: $F(1.89, 151.01) = 404.41, p < .001, \eta^2 = .84$. The mean IV score for Needy Narcissists was significantly greater than both AV and BV scores, and AV and BV scores were both significantly greater compared to NV scores. Due to the difference between NV and IV mean scores, a post-hoc paired samples $t$-test was performed and found that the mean IV score was significantly greater compared to the mean NV score: $t(44) = 10.24, p > .000$.

In sum, the differences between each mean INS value and satisfaction score for Needy Narcissists were significant. Overall, the INS pattern for Needy Narcissists indicates a global perceived interpersonal neediness or dissatisfaction with all aspects of interpersonal interactions.

8.7.5 Individualists ($N=27$)

The fifth group included those who rated IV the highest within-group value on average, followed by AV, NV, and lastly BV the lowest mean value score of all. There were large discrepancies between IV and IS, and between AV and AS. NV scores were slightly higher on average than NS scores. Overall, all mean INS scores were low compared to other groups. This cluster most resembles the "Individualists" (see Figure 8.1.5 below).

The overall difference in mean scores between types of values was significant: $F(3.78) = 23.94, P < .001, \eta^2 = .48$, and the overall differences between mean values and
satisfaction scores were also significant: for A and B scores, $F(2.36, 61.44) = 10.79, p < .001, \eta^2 = .29$, and for I and N scores, $F(2, 52.01) = 18.05, p < .001, \eta^2 = .41$. In sum, for Individualists, mean IV scores were significantly greater compared to all other INS needs scores, and mean AV scores were significantly greater than BV and NV scores. There was a significant discrepancy between IV and IS, and between AV and AS.

Overall, the results of the cluster analysis closely support predictions. The five groups had distinctively different patterns of INS values and need satisfaction, reflecting the predicted characteristics of each group. There was no group that could be described as Satisfied Individualists. (The high Independence Value scores relative to other groups and small IV/IS discrepancy of the Satisfied Narcissists suggests that this group could be considered to represent Satisfied "Independents", however their high BV and NV scores, representing high relatedness values, contradicts a designation of Satisfied Individualists for this group).
Mean INS Value and Satisfaction Scores for each Group.

**Note**
- * significantly greater than Narcissistic Value
- † significantly greater than Independence Value
- ‡ significantly less than Independence Value
- ◊ indicated mean Value score is significantly greater than mean Satisfaction score

8.1.1 "Self-Other Balanced"

8.1.2 "Slightly Lonely"

8.1.3 "Satisfied Narcissists"

8.1.4 "Needy Narcissists"

8.1.5 "Individualists"
8.5 Between-groups Comparisons

To further support the hypothesis that the groups described above are qualitatively different, the next step is to compare differences in INS values between groups.

8.5.1 Interpersonal Value Scores

Firstly, multivariate analysis of variance was performed to test for differences in mean INS Value scores. The groups described above were the independent variables, and INS values were the dependent variables. The assumption of homogeneity of variance was violated: Box's $M=204.67, p<.001$, therefore results should be treated with caution.

Overall differences in average INS Value scores between groups were significant: Wilks' Lambda = .17, $F(16, 733.85)=35.39, p<.001, \eta^2=.35$, and differences were significant for each type of value. The statistics for each value were: Authenticity Value (AV): $F(4, 243)=37.22, p<.001, \eta^2=.38$; Belonging Value (BV): $F(4, 243)=69.78, p<.001, \eta^2=.54$; Independence Value (IV): $F(4, 243)=30.38, p<.001, \eta^2=.33$; and Narcissistic Value (NV): $F(4, 243)=58.36, p<.001, \eta^2=.49$. All INS Values subscales except AV violated the equality of variance assumption, therefore Tamhane's post hoc comparisons for observed means was used to further examine differences between groups according to each INS value subscale mean. For ease of interpretation, the comparison of mean INS value scores across groups is presented in Figure 8.2 below. For mean differences and levels of significance for between-groups comparisons, see Table C6 in Appendix C.
On average, the Self-other Balanced group reported comparatively high AV and BV scores, and relatively low IV and NV scores. The mean AV score was significantly greater than those for the Slightly Lonely group and the Individualists, and the mean BV score was significantly greater compared to Individualists. The mean IV score was significantly less compared to both Narcissistic groups, and finally the mean NV score was significantly less compared to each other group except for Individualists. These results support the description given above for the Self-other Balanced group.

For the Slightly Lonely group, the mean AV score was significantly less than that of the Self-other Balanced, and the mean BV score was significantly lower compared to the Satisfied Narcissists but significantly greater compared to Individualists. The mean IV score was significantly less compared to Satisfied Narcissists and Needy Narcissists,
and the mean NV score was significantly greater on average compared to Self-other Balanced and Individualists. Taken together, these findings support the argument that for the Slightly Lonely group, lower satisfaction of authenticity and belonging needs may be linked to an increase in substitute ego-defensive values: in particular, a higher NV score compared to that for the Self-other Balanced.

For Satisfied Narcissists, the mean IV score was significantly less than Needy Narcissists, but significantly greater on average than all other groups. Similarly, the mean NV score was significantly greater than each other group except the Needy Narcissists. The mean BV score was significantly greater than each other group except Self-other Balanced. Finally for Satisfied Narcissists, the mean AV score was significantly greater than that of the Individualists, but similar to each other group.

For Needy Narcissists, the mean IV score was significantly greater on average compared to each other group, and the mean NV score was significantly greater than each other group except Satisfied Narcissists. The mean AV score was significantly greater compared to Individualists, and the mean BV score was significantly less on average than those of Satisfied Narcissists. These results support the expectation that for the Narcissist groups, ego-defensive needs can be highly valued highly even when salutogenic needs are also highly valued.

Mean INS Values scores for Individualists were significantly lower compared to each other group, with the exception of the mean NV score which was roughly equivalent to the Self-other Balanced group. These results indicate that Individualists have lower interpersonal values overall, even for independence needs.
Overall, the results of the between-groups comparisons of INS values support predictions. The low reported mean INS value scores of the Individualists are of interest. This result reflects the predicted low perceived value of self-other relationships for this group, however the relatively low IV and AV scores were unexpected.

8.5.2 Interpersonal Neediness: Discrepancies between INS Values and Need Satisfaction

Having explored differences in INS values between groups, the next part of the analysis takes into account differences in need satisfaction. The discrepancies between INS value and need satisfaction scores are of interest, given that the need satisfaction scores themselves are not meaningful without taking into account the perceived value of each interpersonal need. Accordingly, the magnitude of discrepancies between each INS value and satisfaction scores were compared between groups. Resultant discrepancy scores represent the degree of "neediness" for each INS need.

To test these differences, discrepancy scores for each INS value were calculated by subtracting mean satisfaction scores from mean value scores. Then multivariate analysis of variance was performed, with group membership the independent variable, and all four INS discrepancies as the dependent variables, to test for significant differences in INS discrepancies between groups. Belonging Discrepancy (BD) and Narcissistic Discrepancy (NO) scores violated the equality of error variance assumption. The overall difference in mean discrepancy scores between groups was significant: Wilks’ = .28, $F(4, 240) = 157.65, p < .001, \eta^2 = .72$. Univariate $F$ statistics showed that groups differed significantly from each other according to each INS discrepancy. The
results for Authenticity Discrepancy (AD) were: $F(4, 243) = 108.57, p < .001, \eta^2 = .64$; for Belonging Discrepancy (BD): $F(2, 243) = 66.12, p < .001, \eta^2 = .52$; for Independence Discrepancy (ID): $F(2, 243) = 114.98, p < .001, \eta^2 = .65$; and for Narcissistic Discrepancy (NO): $F(2, 243) = 96.01, p < .001, \eta^2 = .61$. Tamhane’s post hoc comparisons for observed means was used to further examine differences between groups according to each INS discrepancy score (see Table C7, Appendix C). For ease of interpretation, Figure 8.3 below shows mean INS value scores less mean INS need satisfaction (discrepancy) scores for each group. Bars above the y-axis indicate the degree of dissatisfaction for each INS need, and bars close to or below the y-axis indicate satisfaction of needs.

![Figure 8.3 Mean INS Discrepancy Scores by Group](image-url)
The Self-other Balanced group reported the lowest interpersonal neediness on average compared to each other group, according to each INS discrepancy score. Mean discrepancy scores were significantly lower than all other groups, except for the Authenticity Discrepancy (AD) comparison with Satisfied Narcissists, and the Belonging Discrepancy (BD) comparison with Individualists. This last comparison should be interpreted in light of the Individualists’ reporting both low mean BY and BS scores, which indicates that despite low belonging need satisfaction, Individualists do not value belonging and therefore do not perceive themselves as lacking in their need for belonging. All discrepancy scores for the Self-other Balanced group except AD were less than zero, indicating that the Self-other Balanced group tend to be more than satisfied that their interpersonal needs are met.

The Slightly Lonely group reported significantly greater mean INS discrepancy scores compared to Self-other Balanced, and Satisfied Narcissists. Slightly Lonely also had significantly greater BD scores on average compared to Individualists. However, Slightly Lonely participants reported significantly lower discrepancy scores on average compared to Needy Narcissists for each INS need.

For the Satisfied Narcissist group, all mean discrepancy scores were significantly greater compared to Self-other Balanced, excepting the mean AD score. However, Satisfied Narcissist discrepancy scores were all close to zero, and the differences with Self-other Balanced were magnified given that the latter’s BD, Independence Discrepancy (ID) and Narcissistic Discrepancy (ND) scores were below zero. Satisfied Narcissists report significantly lower discrepancy scores on average for each INS need compared to the Slightly Lonely and Needy Narcissist groups. Finally, discrepancies are
significantly less than Individualists for AD and ID scores. On the whole, and against predictions, the Satisfied Narcissists reported little interpersonal neediness. The Needy Narcissists had significantly higher reported interpersonal neediness for all interpersonal needs compared to all other groups, as predicted.

Finally, while Individualists reported comparatively low mean INS values scores on average (see Figure 8.1.5) which reduced their value/satisfaction discrepancies, they nevertheless reported clearly unmet needs for independence and authenticity. Overall, Individualists reported significantly greater AD and ID scores compared to Self-other Balanced and Satisfied Narcissists. They reported significantly lower AD, BD and ND scores compared to Needy Narcissists, and also a significantly lower BD mean score compared to Slightly Lonely. These findings are in line with predictions that Individualists perceive little need of others.

These results support the broad argument that the degree of interpersonal neediness reflects the strength of ego-defensive versus salutogenic values in the make-up of interpersonal needs. The greater the degree of ego-defensive values compared with salutogenic values, the more likely that interpersonal needs were perceived as unmet. In ascending order of reported interpersonal neediness: the Self-other Balanced group reported the least interpersonal neediness compared to other groups. Next, the Satisfied Narcissists were slightly needy compared to Self-other Balanced, except for their satisfied narcissistic needs. Individualists reported authenticity neediness greater than the former groups, and the highest independence neediness of all groups except the Needy Narcissists. The Slightly Lonely group reported authenticity and belonging neediness
greater than every other group except the Needy Narcissists. Finally, the Needy Narcissists reported greater neediness for each INS need than any other group. These results are in line with predictions.

8.6 Summary of Hypotheses for Self-concept

The social cognitive model of human nature suggests that the self is created partly according to social values and thereby perceptions of needs. The present study considers needs in terms of what is valued and what is gained or lacking in interpersonal interactions. These interpersonal need dynamics also support or hinder well-being. It is therefore assumed that there are relationships between the make-up of the self-concept and well-being. Based on exploration of interpersonal need dynamics, the present study speculates as to the nature of these relationships, in order to answer the broad research questions: Do needs for well-being depend on the type of person that you are? Or are basic needs for well-being, including belonging and autonomy, universal? The exploration of self-concept and its relationship to interpersonal needs is now considered, before moving on to the exploration of relationships between well-being variables and interpersonal needs.

This thesis argues for the co-existence of multiple self-aspects with complementary interpersonal values within a given self-system. The present study proposes that while perceived interpersonal needs as values by themselves are linked to one’s sense of self, the satisfaction of interpersonal needs may strengthen this association. For example, high AV and BV may contribute to an autonomous self-definition, and even more so if authenticity and belonging needs are satisfied. The present study proposes that
the self-concept can be a multifaceted self-system, such that multiple satisfied interpersonal needs support a complex self-concept. For example, satisfied authenticity and belonging needs may support a simultaneously autonomous and related self-concept. On the other hand, unsatisfied authenticity and belonging needs may undermine the autonomous and related self-concept, while satisfied substitute needs (independence and narcissism) may both undermine autonomy and relatedness, and contribute to the Independent self. The following predictions concern the autonomous self, as measured by the Self-Determination Scale (SDS; Sheldon & Deci, 1996), the related self, as measured by the Related-Interrelated Self Scale (RISC; Cross, Bacon & Morris, 2000), and the independent self, as measured by the autonomy subscale of the Adjective Checklist (ACL-A; Gough & Heilbrun, 1983). The narcissistic self, as a complex personality construct, is dealt with separately below for ease of interpretation.

Given that satisfied needs for autonomy and relatedness are argued to support a predominantly autonomous and interrelated self-concept, it was expected that the Self-other Balanced group would report high and equivalent autonomous-self and relational-self scores, and that their SDS and RISC scores would be significantly greater compared to all other groups. It was expected that their independent-self scores would be significantly lower than their SDS and RISC scores, on average. The equivalency of self-determination and interrelatedness in the self-concept reflects the complementary nature of autonomy and relatedness values, and high salutogenic need satisfaction for this group. For these reasons, the current study defines the Self-other Balanced group as representing the "healthy self".
Those with relatively high mean AV and BV scores, but significant discrepancies between their salutogenic values and need satisfaction, the Slightly Lonely group, were expected to report autonomous-self and relational-self scores that are somewhat lower than those of the Self-other Balanced group on average. The discrepancy between IV and IS indicates a relatively low independent-self average score would be reported by the Slightly Lonely group. Like Self-other Balanced, it was expected that standardised SDS and RISC scores for Slightly Lonely would be equivalent and greater than ACL-A scores.

The Satisfied Narcissists reported relatively high mean IV and NV scores compared to other groups, no discrepancy between NV and NS, and small but significant discrepancies between other INS needs and satisfaction scores. Accordingly, it was expected that this group would report somewhat lower autonomous-self and relational-self mean scores compared to the Self-other Balanced group, but a significantly higher independent self mean score on average compared to all other groups. Within-group comparison of standardised scores was expected to reveal a self-concept make-up for this group featuring a dominant independent-self component.

The Needy Narcissist group, reporting large and significant discrepancies between all INS need and satisfaction scores, were expected to report relatively low autonomous, relational and independent self-concept scores overall. Given that their mean IV score was the highest of their interpersonal values, it was expected that they would report a predominantly independent self-concept.

The Individualists reported significant discrepancies between AV and AS, and between IV and IS. Despite their high values for authenticity and independence, it was expected that due to poor satisfaction of these needs they would report low autonomous
and independent self-concepts scores relative to other groups. Given their low value for belonging, they were also expected to report the lowest mean relational-self score of all groups. Overall, they were expected to report a predominantly independent self-concept.

8.7 Results for Self-concept Hypotheses

A series of multivariate analyses of variance were performed to test differences in mean scores between groups on self-concept measures. Initially, differences between groups according to relational-self (RISC), autonomous-self (SDS) and independent-self (ACL-A) scores as the dependent variables were examined. The homogeneity of variance assumption was upheld for this analysis; Box’s $M = 39.93, p > .001$ (Hair et al, 1998). There was a significant difference in mean self-concept scores overall between groups; Wilk’s = .58, $F(12,638) = 12.29, p < .001$, $\eta^2 = .17$, and each self-concept measure differed significantly between groups. The univariate statistics for SDS were; $F(2,243) = 27.20, p < .001$, $\eta^2 = .31$, for RISC; $F(2,243) = 7.77, p < .001$, $\eta^2 = .11$, and for ACL; $F(2,243) = 5.34, p < .001$, $\eta^2 = .08$. The RISC violated the equality of variance assumption, therefore Tamhane’s post hoc comparisons for observed means was used to further examine differences between groups according to each self-concept measure (see Table C8 in Appendix C). This analysis compared between-group differences in self-concept, however, given that the self-concept measures employ different scales, Figure 8.4 shows a comparison of standardised self-concept scores for each group for ease of interpretation.
As predicted, the Self-other Balanced group reported the highest autonomous self-concept mean score. Their SDS score was significantly higher than mean SDS scores for all other groups, except Satisfied Narcissists. Against the hypothesis that only those who report high BV and high BS would report a strong sense of relational self, there was little difference between mean RISC scores between groups. However, the mean RISC score for Self-other Balanced was significantly greater compared to Individualists. Against predictions, the mean SDS score for Self-other Balanced was greater on average compared to the mean RISC score, however as expected the mean ACL-A score was less than both the SDS and RISC mean scores. Unexpectedly, these results indicate a predominantly autonomous self-concept for the Self-other Balanced group, rather than the equally autonomous/relational self predicted.
8.7.2 Slightly Lonely

As expected, the Slightly Lonely group reported a significantly lower mean SDS score compared to Self-other Balanced. However, there was no difference between RISC or ACL-A mean scores between the two groups. As expected, standardised SDS and RISC scores for Slightly Lonely were equivalent and greater than standardised ACL-A scores. These results indicate an equally autonomous/related Self, and a lower independent-self component for the Slightly Lonely group.

8.7.3 Satisfied Narcissists

As expected, those with relatively high scores on average for IV and NV, along with an equivalently high mean NS score, also had the highest independent-self mean score. The differences in ACL-A mean scores between this group and all other groups, except the Self-other Balanced, were significant. These results support predictions that satisfied narcissistic needs are associated with a more independent sense of self compared to other groups, perhaps via a false sense of self-reliance. On average, autonomous-self scores were significantly greater compared to Needy Narcissists and Individualists, and the relational-self score was significantly greater compared to Individualists. These results reflect the greater satisfaction of autonomy and relatedness needs compared to Needy Narcissists and Individualists. Unexpectedly, the standardised ACL-A score for Satisfied Narcissists was less than SDS and RISC standardised scores, and SDS and RISC standardised mean scores were equivalent. These results go against predictions for a predominantly independent self for Satisfied Narcissists, and indicate an equally autonomous/relational self.
8.7.4 Needy Narcissists

Overall, results for Needy Narcissists support the prediction that highly valued but unsatisfied interpersonal needs would be linked with low self-concept scores. The autonomous-self score reported by this group was significantly less compared to every other group except Individualists. Against predictions, standardised self-concept scores reveal that instead of a predominantly independent self-concept, the relational-self was dominant for Needy Narcissists. This group was the only one to report a predominantly interrelated self-concept.

8.7.5 Individualists

As predicted, Individualists reported the lowest autonomous-self scores on average; significantly lower than all other groups except the Needy Narcissists. As expected, the Individualist group had a significantly lower mean relational-self score compared to each other group. Also as predicted, the average independent-self score for Individualists was less than any other group, and significantly less compared to Satisfied Narcissists. Unexpectedly, and like the Slightly Lonely and Satisfied Narcissist groups, Individualists reported an equally autonomous/relational self. These results support the argument that values for independence from others do not contribute to a highly independent sense of self unless this need is satisfied. However, the results did not support the prediction that Individualists would report a predominantly independent self-concept.

8.7.6 Overall results for self-concept
Self-concept measures distinguish between groups somewhat according to expectations. Satisfied needs for authenticity and independence appear to contribute to the autonomous and independent self-concepts, while unsatisfied independence needs undermine the independent self. The results indicate that the degree to which respondents viewed relationships with others as influential in their sense of self (relational-self) varied little according to patterns of INS values and need satisfaction, except for those who reported low interpersonal values overall, the Individualists, who had the lowest relational-self scores on average. Overall, it appears that a high value for belonging, even if this need is unsatisfied, is sufficient to contribute to the related self. It is notable that all mean self-concept scores for Individualists were low relative to other groups. This may suggest a comparatively poor or ambiguous sense of self overall for those who report low values for interpersonal needs. These results are in line with the general proposition that satisfied interpersonal needs are linked to the creation of self-concept, and that satisfied salutogenic needs are positively related to the autonomous and interrelated self.

The results also provide some support for the broad contention that multiple self-aspects may co-exist by means of complementary and satisfied interpersonal needs, although not entirely as predicted. The low mean relational-self score compared to the mean autonomous-self score for Self-other Balanced was unexpected. However, given that their mean RiSe score was equivalent to other groups, it appears that the strong component of autonomous-self in their self-concept is not at the expense of the strength of the related-self component. This suggests that the relationship between satisfied
salutogenic needs and the autonomous self is stronger than that with the related self. Valuing belonging is enough to support the interrelated self.

In contrast to results for the Self-other Balanced group, SDS and RISC scores were roughly equivalent for both Satisfied Narcissists and Slightly Lonely. Together, these results go against the proposal that only satisfied salutogenic values (AV and BV) contribute to the simultaneously autonomous and related self. In addition, the high RISC average scores reported by the Satisfied Narcissists suggests that the possible contribution of satisfied narcissistic needs to the related self cannot be ruled out. A possible explanation is that despite their perceived independence, supported by their high mean independent-self score, Satisfied Narcissists paradoxically need others to affirm their self-serving biases. Because this need is satisfied, it supports their relational self-concept. However, while Needy Narcissists reported a large discrepancy between belonging values and need satisfaction, they also reported a predominantly interrelated self-concept. Again, the valuing of belonging seems to be enough to support the interrelated self.

8.8 Summary of Hypotheses for Narcissism

For ease of interpretation of results, relationships between groups and narcissistic components of personality were considered separately to those with the self-concept measures explored above. Of interest in the present study are the narcissistic components of authority (NPI-A) and self-sufficiency (NPI-S), argued by previous researchers to represent the positive aspects of narcissism, or satisfied narcissistic needs, and exploitativeness (NPI-Ex) and entitlement (NPI-En), representing the negative aspects or
unsatisfied narcissistic needs (Raskin & Terry, 1988). Like the constructs of self-concept explored above, these components of narcissism are considered in the present study as representations of self in relation to other.

It was predicted that those who report that AV and BV are equally highly valued and satisfied, the Self-other Balanced group, would have significantly higher NPI Authority (NPI-A) and Self-sufficiency (NPI-S) subscale scores on average compared to all other groups except Satisfied Narcissists, and significantly lower NPI Exploitative (NPI-Ex) and Entitlement (NPI-En) scores compared to all other groups.

While no specific predictions regarding relationships between the narcissistic components of self-concept and the Slightly Lonely group were made, they were included in the analysis on an exploratory basis.

Given that the Satisfied Narcissists reported the highest mean NV score compared to other groups, and that this need was satisfied, it was expected that they would report higher mean authority and self-sufficiency subscale scores compared to each other group except for the Self-other Balanced group, but significantly lower exploitative and entitlement scores compared to the Needy Narcissists and Individualists.

The Needy Narcissist group reported mean NV and IV scores higher than AV and BV scores, with large discrepancies for all INS needs. This group values ego-defensive needs, and suffers unsatisfied ego-defensive and salutogenic needs. This pattern was predicted to be associated with the negative components of narcissism. Needy Narcissists were expected to report significantly lower mean authority and self-sufficiency scores and significantly higher mean exploitative and entitlement scores compared to the Self-other Balanced and the Satisfied Narcissist groups.
The Individualists reported comparatively low NV and BV, and large discrepancies between independence and authenticity values and need satisfaction. Individualists are a mixture of unvalued rather than unsatisfied salutogenic values (BV), unsatisfied salutogenic values (AV) and unsatisfied ego-defensive values (IV). The lack of salutogenic need satisfaction, and the high degree of independence neediness, suggested that this group would report the lowest authority and self-sufficiency mean scores of all groups. Based on the findings of Study 1 that independence values were positively related to narcissistic entitlement, and also on the argument that unsatisfied ego-defensive needs are related to negative narcissism, it was further speculated that Individualists would also have comparatively high narcissistic entitlement and exploitative scores on average.

8.9 Results for Narcissism Hypotheses

To examine differences in NPI subscale scores according to cluster, MANOVA was performed using group membership as the independent variable and NPI subscales as the dependent variables. The homogeneity of variance assumption was upheld; Box’s $M = 74.20, p > .05$. The groups differ significantly overall on their narcissism subscale scores: Wilk’s $\Lambda = .59, F(20, 794) = 6.92, p < .01$, partial $\eta^2 = .13$, and there are significant differences between groups for each NPI subscale mean score. Univariate statistics for authority were; $F(4, 243) = 17.58, p < .001$, $\eta^2 = .22$; self-sufficiency; $F(4, 243) = 8.42, p < .001, \eta^2 = .12$; superiority; $F(4, 243) = 5.87, p < .001, \eta^2 = .09$; exploitativeness; $F(4, 243) = 3.24, p < .001, \eta^2 = .05$, and entitlement; $F(4, 243) = 8.70, p < .001, \eta^2 = .13$. One subscale, NPI-Entitlement, violated the equality of variance assumption, therefore Tamhane’s post
hoc comparisons for observed means was used to further examine differences between groups according to each subscale. Mean NPI subscale scores for each group are presented in Figure 8.5 below (see Table C9 in Appendix C for comparison statistics).

**Figure 8.5** Mean NPI Subscale Scores for each Group

### 8.9.1 Self-other Balanced

Findings for the Self-other Balanced group were in line with predictions. Their mean authority score was significantly higher than all other groups except Satisfied Narcissists. Their mean self-sufficiency score was significantly higher than Slightly Lonely and Needy Narcissists, while this comparison with Individualists approached significance. The mean entitlement score was lower than every group except Individualists, and significantly lower compared to the Narcissist groups. There were no significant differences in mean exploitativeness between Self-other balanced and other groups. Participants in this group reported having the positive components of narcissism.
to a greater degree than the negative components in their self-concept, on average. Given
their relatively low NY score (see Figure 8.1.1 above), these results suggest that their
sense of self-sufficiency and authority is achieved through salutogenic need satisfaction,
rather than satisfied narcissistic needs.

8.9.2 Slightly Lonely

Slightly Lonely had mean authority and self-sufficiency scores that were
significantly less than those of Satisfied Narcissists, but significantly greater than those of
Needy Narcissists. While their mean authority and self-sufficiency scores were lower
than Self-other Balanced, and higher than Individualists, these differences were not
significant. Mean entitlement and exploitativeness scores were slightly higher compared
to Individualists and Self-other balanced, although these differences were not significant.
The mean exploitativeness score was similar to that of the Satisfied Narcissists. Overall,
the Slightly Lonely sit somewhere in the middle compared to other groups on each
component of narcissism.

8.9.3 Satisfied Narcissists

In line with predictions, Satisfied Narcissists reported a significantly greater mean
authority score compared to every other group, and a significantly greater self-
sufficiency score compared to every other group except Self-other Balanced.
Unexpectedly, Satisfied Narcissists reported the highest mean exploitativeness score of
all groups; this score was significantly higher compared to Self-other Balanced and
Individualists. Also unexpectedly, their mean entitlement score was greater than every
other group except Needy Narcissists, and significantly higher compared to Self-other
Balanced. The satisfied narcissistic needs of this group seem to contribute strongly to each component of narcissism.

8.9.4 Needy Narcissists

In line with predictions, Needy Narcissists reported mean authority and self-sufficiency scores that were significantly lower than every other group except Individualists. As predicted, the mean entitlement score is the highest of all groups, and significantly greater compared to Self-other Balanced and Individualists. Against predictions, the mean exploitativeness score for Needy Narcissists was less on average than each of the other groups, and significantly less than Satisfied Narcissists. Needy Narcissists, with their unsatisfied interpersonal needs, have a high sense of entitlement on average, yet reported low exploitation of others.

Taken together, the results for the two narcissistic groups indicate that for those with a relatively high NV score, a sense of self-sufficiency and authority may depend on interpersonal narcissistic need fulfillment. On the other hand, satisfied narcissistic needs may also support the negative aspects of narcissism. The finding that the unsatisfied narcissists reported low exploitativeness suggests that narcissistic need fulfillment could be linked to exploitativeness. That is, the successful exploitation of others is implicated in narcissistic need satisfaction.

8.9.5 Individualists

Individualists had a significantly lower mean authority score compared to each other group except Needy Narcissists. They reported the lowest mean self-sufficiency score, but only the comparison with Satisfied Narcissists was significant. Unexpectedly, the mean exploitativeness score was lower than every group, although these differences
were not significant. Also against predictions, the mean entitlement score was lower than every other group except Self-other Balanced, and significantly lower compared to Needy Narcissists. These results support the argument that independence and autonomy values do not contribute to the positive components of narcissism unless satisfied. In other words, despite Individualists reporting little need of others (see Figure 2), they do not perceive themselves to be very self-sufficient nor do they have a strong sense of their own authority. However, the unsatisfied independence needs of individualists were not strongly linked to the negative components of narcissism. Despite the raw correlation between IV and entitlement found in Study I, it seems that Individualists do not have covert needs to exploit others in order to satisfy their own needs.

8.9.6 Overall results/or narcissism

Overall, these results provide further evidence that satisfied interpersonal values contribute to self-concept, in this case in terms of the positive and negative aspects of narcissism. Like the autonomous and related self-concepts, self-sufficiency and authority seem linked to common values for and satisfaction of needs for authenticity and belonging. This is most evident for the Self-other Balanced group, as predicted. While Satisfied Narcissists also reported high mean scores for self-sufficiency and authority, their high entitlement and exploitative mean scores suggest that their interpersonal needs are fulfilled at the expense of others, rather than via satisfaction of authenticity and belonging needs. Finally, the results for Individualists echo those for the self-concept measures explored above: their unsatisfied needs for independence and authenticity and low value for belonging are linked with low scores for both negative and positive aspects of narcissism. Perhaps Individualists are so compromised in relationships with other
people that they do not perceive possible benefits in exploiting others to satisfy their own needs, or perhaps they are simply too socially isolated to engage in exploitation of others.

8.10 The Interpersonal Well-being Continuum: Overall Hypothesis

The present study argues that valuing salutogenic interpersonal needs contributes to well-being, especially when these needs are satisfied. In contrast, valuing substitute needs is an indicator of psychological distress or dysfunction, even if these needs are fully satisfied. Considering the possible combinations and outcomes of valued interpersonal needs and need-satisfaction discrepancies, a broad continuum for potential well-being is proposed. In the optimal position for well-being, represented by the Self-other Balanced group, salutogenic needs are valued highly, and are fully satisfied, while ego-defensive needs are given less value. The next level down, the Slightly Lonely group, is identical to the first level in terms of the ranking of interpersonal needs, except that salutogenic needs are not being fully satisfied. At this level, ego-defensive needs may substitute for salutogenic needs, and therefore ego-defensive values will be slightly greater than at the first level. The third level, Satisfied Narcissists, includes those whose ego-defensive needs assume greater value compared to those of the previous levels, yet are being currently satisfied. Psychological well-being is apparent for this group, yet possibly fragile, while social well-being is somewhat impaired. Sharing the lowest levels are the Needy Narcissists, with their equivalent rating of ego-defensive and salutogenic needs and large overall need—satisfaction discrepancies (neediness), and Individualists, who are a mixture of unvalued rather than unsatisfied salutogenic values (BV), unsatisfied salutogenic values (AV) and unsatisfied ego-defensive values (IV).
8.11 Summary of Hypotheses for Alienation

The present study argues that interpersonal values and need satisfaction have a pervasive impact on psychological and social well-being. The following section considers impact on social well-being in terms of four subtypes of alienation taken from the Alienation Test (Maddi, Kobasa & Hoover, 1979), allowing for exploration of the impact on these qualitatively different types of alienation. These include alienation from others (AI-Oth), society (AI-Soc) and family (AI-Fam), and also personal well-being in terms of alienation from self (AI-Self).

Following the continuum hypothesis for well-being, it was expected that the Self-other Balanced, with fulfilled salutogenic needs for authenticity and belonging, would have healthy relationships with both themselves and with others, and would report low alienation scores. The Slightly Lonely group, with unfulfilled salutogenic needs, were expected to report some degree of alienation from self, others, society and family. The Satisfied Narcissists were expected to report a greater degree of alienation compared to the Self-other Balanced and Slightly Lonely groups, given that ego-defensive values are argued to undermine healthy self-other relationships. The Needy Narcissists, with global unfulfilled interpersonal needs, were expected to report a high degree of alienation overall. Finally, it was expected that the Individualists, with low values for belonging and unfulfilled independence and autonomy needs, would also report a high degree of alienation.
8.12 Results for Alienation Hypotheses

MANOVA using mean alienation subscale scores as the dependent variables, and group membership as the independent variable, found overall significant differences between groups (Wilk’s $\lambda = .51, F(4,243)=9.00, p<.001, \eta^2=.16$) and for each alienation subscale. The univariate statistics for AI-Self (alienation from self) were $F(4,243)=36.35, p<.001, \eta^2=.37$; for AI-Soc (alienation from society) $F(4,243)=23.13, p<.001, \eta^2=.28$; for AI-Oth (alienation from others) $F(4,243)=35.05, p<.001, \eta^2=.37$; and for AI-Fam (alienation from family) $F(4,243)=28.00, p<.001, \eta^2=.32$. The equality of variance assumption was upheld, and Bonferroni’s test of observed means was used for the post hoc analysis (see Table CI 0 in Appendix C for comparison statistics).

Mean alienation subscale scores are presented in Figure 8.6 below.
8.12.1 Self-other Balanced

Those who value salutogenic needs and have these needs satisfied were expected to be the least alienated from self (AI-Self), society (AI-Soc), others (AI-Oth) and family (AI-Fam) compared to every other group.

As expected, Self-other Balanced had the lowest alienation subscale scores compared to every other group. Self-other Balanced mean alienation subscale scores were significantly lower compared to those of each other group except Satisfied Narcissists. Only one comparison with the latter group approached significance: that for alienation from society. These results support the argument that satisfied salutogenic needs indicate low levels of alienation overall.

8.12.2 Slightly Lonely

Those who value salutogenic needs but do not have these needs satisfied were expected to suffer some degree of alienation overall, and a moderate degree of alienation from self in particular. For the Slightly Lonely, the mean alienation from self subscale score was expected to be greater than those for Self-other Balanced and Satisfied Narcissists, but less than those for Needy Narcissists and Individualists.

As expected, the Slightly Lonely group reported significantly higher mean scores for each alienation subscale compared to the Self-other Balanced group. Each mean alienation subscale score was also greater compared to the Satisfied Narcissists, but none of these differences were significant. All Slightly Lonely mean alienation subscale scores were significantly less compared to the remaining two groups. These results suggest that unsatisfied salutogenic needs contribute to each aspect of alienation to a moderate degree,
but fail to support the prediction that unsatisfied salutogenic needs contribute to alienation from self in particular.

8.12.3 Satisfied Narcissists

For this group, small but significant discrepancies between INS values and need satisfaction (other than NV) indicate a greater degree of alienation from self compared to Self-other Balanced, but less compared to groups with greater INS discrepancies. Satisfied Narcissists were also expected to report some alienation from society and others due to their high mean ego-defensive scores relative to other groups. Therefore, Satisfied Narcissists were also expected to have higher AI-Soc, AI-Oth and AI-Fam mean scores compared to Self-other Balanced.

As predicted, Satisfied Narcissists reported significantly lower mean alienation subscale scores compared to Needy Narcissists and Individualists. As predicted, Satisfied Narcissists reported greater mean alienation subscale scores compared with the Self-other Balanced group, but differences were not significant.

8.12.4 Needy Narcissists

Those who value substitute needs highly and report that their both salutogenic and substitute needs are not satisfied were expected to report very high alienation subscale scores compared to the first three groups. It was expected that Needy Narcissists, with the greatest discrepancies between needs and need satisfaction scores of all groups, would have the highest mean scores for alienation from self, society, others and family compared to every other group except perhaps Individualists.

Results for Needy Narcissists were in line with expectations. They reported significantly greater alienation from self, society and family subscale scores on average
compared with every other group except Individualists, and a significantly greater mean alienation from others score compared with Self-other Balanced and Satisfied Narcissists. They also reported greater mean alienation from self and from others compared to Individualists, although these difference were not significant. These results indicate that unfulfilled interpersonal needs are linked with high and pervasive alienation towards self and others.

**8.12.5 Individualists**

Individualists report little need of others overall (see Figure 2) therefore it might be argued that they do not feel alienated from others or from society because they do not value social belonging. However, the present study argues that certain interpersonal needs are basic to well-being. Failure to value and satisfy authenticity and belonging needs will result in poor social well-being, thus very high alienation subscale scores. It was predicted that Individualists would have the highest mean AI-Soc, AI-Oth and AI-Fam of all groups. Again, it might be argued that Individualists, who value authenticity and independence, might be interested and invested in self-knowledge. However, this thesis asserts that the valuing of both authenticity and belonging, and the satisfaction of these needs, is required to support self-regulation and self-development. Thus Individualists were expected to be highly alienated from themselves, and to report the highest mean alienation from self score compared to each other group except Needy Narcissists.

As predicted, Individualists reported significantly greater mean alienation scores compared to every other group except Needy Narcissists. Their highest mean alienation was alienation towards others. These results support the argument that despite
Individualists' low perceived interpersonal needs, they feel strongly alienated overall, particularly towards other people in general. Overall, this is interpreted as strong evidence that belonging is a basic need for social well-being, even for those who do not value belonging.

8.13 Summary of Hypotheses for Depression, Anxiety, Stress and Self-esteem.

The next step in the exploration of interpersonal needs and well-being was to investigate differences in levels of depression, anxiety, stress and self-esteem between groups, using the Depression Anxiety Stress scale, short form (DASS-21; Lovibond & Lovibond, 1995) and the Self-Esteem Scale (SES; Rosenberg, 1965). Unsatisfied needs are argued to broadly contribute to psychological distress and undermine self-worth, while satisfied salutogenic needs contribute to self-worth and positive self-other evaluations, and support psychological well-being. Once again, it was predicted overall that those with satisfied salutogenic needs would report the highest level of well-being compared to those with unfulfilled salutogenic needs, fulfilled ego-defensive needs, and unfulfilled ego-defensive needs or unvalued salutogenic needs, in order of decreasing well-being.

Researchers suggest that narcissism may artificially inflate self-esteem, resulting in fragile self-esteem. For those with comparatively high scores for narcissistic values and need satisfaction, the Satisfied Narcissists, self-esteem may be positively and significantly correlated to narcissism. In contrast, self-esteem should not be related to narcissism for the Self-other Balanced group. Therefore, it was predicted that when the contribution of narcissism to self-esteem is statistically controlled, the mean self-esteem
score for Satisfied Narcissists would be reduced, becoming significantly lower on average compared to the mean self-esteem score for Self-other Balanced.

It was predicted that Self-other Balanced group would report the lowest mean depression, anxiety and stress scores on average compared to the other groups, and the highest mean self-esteem score compared to all other groups except Satisfied Narcissists. The Slightly Lonely group were expected to report moderate levels of depression, anxiety and stress, and somewhat lower self-esteem compared to Self-other Balanced.

Satisfied Narcissists were expected to report slightly higher mean depression, anxiety and stress scores compared to Self-other Balanced, and equally high self-esteem. However, when the effects of narcissism (as measured by the NPI), on self-esteem were statistically controlled, it was expected that the self-esteem score for Satisfied Narcissists would be significantly less compared to Self-other Balanced. It was expected that Needy Narcissists, with the greatest need dissatisfaction of all groups, would report the highest depression, anxiety and stress scores and the lowest self-esteem score on average compared to all other groups.

Finally, Individualists, whose overall interpersonal neediness is less than that of Needy Narcissists, were expected to report slightly lower DAS subscale scores, and slightly higher self-esteem scores on average, compared to Needy Narcissists.

8.14 Results for Depression, Anxiety, Stress and Self-esteem Hypotheses

Differences between groups in general well-being (DASS:21 and SES scores) were examined with MANGVA, using group membership as the independent variable. The overall difference between clusters was significant (Wilk’s $\lambda = .54$, $F(4, 16) = 10.35, p$...)
<.001, $\eta^2 = .14$), and there are significant differences for each cluster. The univariate statistics for self-esteem were: $F(4,243)=26.05, p < .001, \eta^2 = .30$, for depression; $F(4,243)=39.01, p < .001, \eta^2 = .39$, for anxiety $F(4,243)=22.51, p < .001, \eta^2 = .27$, for stress $F(4,243)=28.80, P < .001, \eta^2 = .32$. Between-groups comparison statistics for well-being measures are presented in Table e11 in Appendix C. Figure 8.7 below shows mean DASS scores for each group.

![Figure 8.7](image)

**Figure 8.7** Mean Depression, Anxiety and Stress scores according to Group

Analysis of covariance was performed to test differences in mean self-esteem between Self-other Balanced and Satisfied Narcissists whilst controlling for the effects of the co-variate, narcissism, on self-esteem. Narcissism was measured with the total score of the four Narcissistic Personality Inventory subscales of interest in the present study (NPI; Raskin & Terry, 1988). The assumptions of homogeneity of variance and regression were upheld. ANCOVA showed significant main effects for both narcissism:
$F(1,84) = 7.94, p < .01$, and for group membership: $F(1,84) = 7.44, p < .01$. Controlling for the effects of narcissism on self-esteem adjusted mean self-esteem downwards for Satisfied Narcissists to 29.49 (std.error = 0.95) and increased mean self-esteem for Self-other Balanced to 33.35 (std.error=0.99) giving a mean difference of --4.13 (std.error =1.41, p<0.01). Figure 8.8 gives mean self-esteem scores for each group, and a comparison of self-esteem scores for the Self-other Balanced and Satisfied Narcissist groups after adjusting for the effects of narcissism on self-esteem.

![Figure 8.8](image)

**Figure 8.8** Mean Self-esteem scores for all Groups, and for Self-other Balanced and Satisfied Narcissists when Controlling for Narcissism

### 8.14.1 Self-other Balanced

As expected, Self-other Balanced had the lowest mean DASS scores compared to the other groups, however the differences with Satisfied Narcissist mean DASS scores were not significant. The Self-other Balanced mean self-esteem score was significantly higher than every other group except for Satisfied Narcissist, however ANCOVA showed
that when the relationship between self-esteem and narcissism is controlled, the Self-other Balanced group did have significantly greater self-esteem on average compared to Satisfied Narcissists.

8.14.2 Slightly Lonely

As expected, the Slightly Lonely group reported significantly higher mean depression, anxiety and stress scores on average compared to the Self-other Balanced group. Against predictions, they reported higher mean DASS scores compared to Satisfied Narcissists, but these differences were not significant. In line with predictions, the Slightly Lonely group reported a significantly lower mean depression score than both Needy Narcissists and Individualists, and a significantly lower mean stress score than Needy Narcissists. The Slightly Lonely group also reported a significantly lower mean self-esteem score compared to Self-other Balanced and Satisfied Narcissists, and a significantly higher mean self-esteem score compared to Needy Narcissists. Together, these results indicate that unsatisfied salutogenic needs are linked with moderate levels of psychological distress relative to other groups.

8.14.3 Satisfied Narcissists

The Satisfied Narcissists reported significantly lower mean depression and stress scores compared to Needy Narcissists and Individualists, and a significantly lower mean anxiety score compared to Needy Narcissists and Slightly Lonely. They also reported a mean self-esteem score that was significantly greater compared to every other group except the Self-other Balanced group. However, controlling for the effects of narcissism on self-esteem gave Satisfied Narcissists a significantly lower mean self-esteem score compared to the Self-other Balanced group. This result indicates that, unlike the high
self-esteem of the Self-other Balanced group, the high self-esteem of Satisfied Narcissists may be fragile, or dependent on satisfaction of narcissistic needs.

8.14.4 Needy Narcissists

In line with predictions, those participants who reported that their interpersonal needs were not satisfied, the Needy Narcissists, also reported a significantly higher mean stress score than every other group, a significantly higher mean depression score than every other group except Individualists, and a significantly greater mean anxiety score than Self-other Balanced and Satisfied Narcissists. The Needy Narcissists reported significantly lower self-esteem scores on average than every group except Individualists.

8.14.5 Individualists

Finally, the Individualists had significantly lower self-esteem and significantly greater stress and anxiety scores on average compared to Self-other Balanced and Satisfied Narcissists, and a significantly greater depression score compared to all other groups except Needy Narcissists.

8.14.6 Overall results for depression, anxiety, stress and self-esteem

These results support the argument that satisfied salutogenic needs contribute broadly to psychological well-being. Satisfied salutogenic needs appear to contribute to self-worth, while unsatisfied needs appear to broadly contribute to psychological distress and undermine self-worth. As predicted, the Self-other Balanced group reported the highest level of well-being, while Needy Narcissists and Individualists reported the lowest levels of well-being. Also as predicted, narcissism appears to inflate self-esteem for Satisfied Narcissists, but not for the Self-other Balanced group. Against predictions,
the Slightly Lonely group report greater psychological distress compared to Satisfied Narcissists.

8.15 Hypothesis for Social Anxiety

The sample for the present study includes 82 respondents (32% of the total) who reported a diagnosis of social anxiety or social phobia in the past two years. Components of social anxiety include fear of negative evaluation and social avoidance. The current study speculates that social anxiety may reflect an unsatisfied need for positive evaluation or appreciation from others, and unsatisfied interpersonal needs overall. It was therefore proposed that the Needy Narcissists would include a high proportion of respondents with a diagnosis of social anxiety. In contrast, unfulfilled autonomy needs, independence needs or belonging needs alone (the Individualist and Slightly Lonely groups, respectively) would be unrelated to social anxiety. Satisfied autonomy and belonging needs are argued to protect against interpersonal dysfunction such as social anxiety, while satisfied needs for appreciation from others (narcissistic needs) may also protect against social anxiety. It was therefore predicted that the Self-other Balanced and Satisfied Narcissist groups would have a significantly less than average proportion of respondents with social anxiety.

8.16 Results for Social Anxiety Hypotheses

A cross-tabulation using diagnosis of social anxiety and group membership as the categories was performed, to examine any differences in the proportion of cases with social anxiety between groups. The overall chi-square statistic indicated a significant relationship between group membership and diagnosis of social anxiety: chi-square (4) =
56.21, $p < .001$. As predicted, there was no significant difference in the expected and actual count of social anxiety cases for the Slightly Lonely and Individualist groups, the Self-other Balanced and Satisfied Narcissist groups had significantly fewer than expected cases, while the Needy Narcissists alone had significantly more than expected cases (see Table 8.9 below). These results were precisely in line with predictions.

**Table 8.9**

Expected and Actual Proportions of Diagnosed Social Anxiety according to Group

<table>
<thead>
<tr>
<th>Group</th>
<th>Self-other B'd N=42</th>
<th>Slightly Lonely N=53</th>
<th>Sat. Narcissists N=45</th>
<th>Needy Narcissists N=81</th>
<th>Individualists N=27</th>
</tr>
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<tbody>
<tr>
<td>Actual count</td>
<td>1</td>
<td>18</td>
<td>3</td>
<td>47</td>
<td>11</td>
</tr>
<tr>
<td>Expected count</td>
<td>13.5</td>
<td>17.1</td>
<td>14.5</td>
<td>26.1</td>
<td>8.7</td>
</tr>
<tr>
<td>Adj. Std. Residual</td>
<td>-3.4**</td>
<td>.2</td>
<td>-3.0*</td>
<td>4.1**</td>
<td>.8</td>
</tr>
</tbody>
</table>

*Adjusted standardised residual is significant at the .01 level
**Adjusted standardised residual is significant at the .001 level

More than half of the respondents in the Needy Narcissist group had reported a diagnosis of social anxiety in the past two years. In order to test whether there were meaningful differences between those with and without a diagnosis in this group, One-way ANOVA was performed using well-being measures as the dependent variable, and this found small but significant differences between those with and without a social anxiety diagnosis (at the .05 level) for all well-being measures.
Overall, those with the diagnosis report lower well-being scores. However, there were no significant differences for any INS subscales with the exception of a small but significant difference for Narcissistic Satisfaction (again at the .05 level). The mean NS score for Needy Narcissists with a social anxiety diagnosis was 2.6, while the mean NS score for Needy Narcissists without a diagnosis of social anxiety respondents was 3.1. Overall, it was concluded that these differences were not large enough to consider those with a diagnosis separately to those without.

The ANOVA results suggest that differences in well-being between Needy Narcissists with and without social anxiety are not due to differences in the interpersonal value and need satisfaction patterns considered in the present study. It can be assumed that social anxiety is also related to other interpersonal needs such as social competence, however social competence needs were not included in the present research.

Finally, reflecting the sampling method (see Chapter 5, section 5.1) the results of the cross tabulation indicate that the relative proportions of the groups found in the present data cannot be generalized to the general population. That is, given the large number of individuals with a diagnosis of social anxiety comprising the "Needy Narcissist" group, it cannot be concluded from the data that the proportion of "Needy Narcissists" to "Self-other Balanced" individuals in the general population resembles those found in the present study.
CHAPTER 9
DISCUSSION

9.1 Introduction

The initial premise of the current study is that the understanding of human psychological health entails a position on the nature of human beings. The broad and dominant (although increasingly challenged) assumption in psychology is that human nature is fundamentally independent, implying that well-being may depend largely on fulfillment of "individualistic" independence and self-enhancement needs, and neglecting the importance of relatedness needs for well-being. In contrast are the relativistic implications of some social cognitive research: that needs for well-being are constrained by culture and/or self-concept. The present study considers both of these perspectives as insufficient for understanding what is needed for human well-being.

Instead, the present study draws on Self-determination Theory and the construction of self-concept explored by social-cognitive researchers, and proposes an overall dynamic view on human nature. The construction of self-concept and the creation of well-being are two processes that can be elucidated according to this dynamic and self-organisational perspective. According to the organismic view of human nature, needs for well-being are argued to be universal requirements for growth, development, and healthy functioning (Deci & Ryan, 2002; Ryan, 1995).

However, the current study also identifies limitations in previous research based on the organismic view: namely, a somewhat tautological approach to exploring need dynamics, based on the assumption that salutogenic needs are simply innate to human
nature, and are fulfilled according to environmental supports. This approach has lead to salutogenic needs being conceived as requirements for positive functioning, environmental nutriments, and outcome measurements, and this in tum has lead to the neglect of the study of intrapsychic variables and individual differences that may shed light on relationships between needs, need satisfaction and well-being. The present study builds on recent research regarding the salutogenic qualities of specific values and goals, and explores cognitive aspects of need dynamics that include the relationship of perceptions of needs and need satisfaction to well-being, and to self-concept. Despite its limitations, SDT research provides strong evidence that psychological well-being is created in part by the satisfaction of needs that support both interdependence and autonomy, with the implication that these two needs are somehow complementary. In contrast, SDT proposes that ill-being is fostered by the substitution of ego-defensive values or needs that tend to be less than satisfied, and may undermine the satisfaction of needs for interdependence and autonomy. Furthermore, the present study speculates that even the satisfaction of ego-defensive needs may compromise well-being. Satisfied ego-defensive needs for independence and narcissism may appear to support well-being, for example in terms of perceived self-esteem and self-sufficiency, but when other factors such as the contingent nature of narcissistic self-esteem, and the interpersonal or social aspects of psychological well-being are taken into account (ie., alienation), limitations to well-being posed by ego-defensive values may become evident.

The creation or compromise of well-being relies in part on the valuing and fulfillment of particular interpersonal needs. Likewise, the construction of self-concept is similarly related to the interpersonal values held by a given person, and whether these
needs are satisfied. The composition of self-concept is therefore argued to be implicated in psychological well-being, via the type and strength of interpersonal values, and the perception of need satisfaction. This argument suggests a type of "healthy self", linking personality with well-being.

The argument presented by the current research for the universality of needs for well-being does not rest on the assumption that salutogenic needs are simply innate to human nature. Rather, it is assumed that human nature, or the self, is partly shaped by the adoption of certain values or perceived needs, and the perception of satisfaction of needs. "Human nature" can vary in terms of independence and interdependence, and in underlying perceived needs, but needs for well-being remain the same despite these individual differences. Evidence for this is argued to be stronger support for the universality of needs for well-being than the assumption that these needs are simply innate in human nature.

The primary aim of the present study was to explore the impact on well-being of proposed salutogenic and substitute values, and of need satisfaction versus neediness. A secondary, related aim was to explore the relationship of need dynamics to the make-up of self-concept. The current study attempted to meet these aims by taking an essentially "bottom-up" approach; by investigating the dynamics of interpersonal needs underlying the creation of well-being and shaping the make-up of self-concept. Chapters 6 and 7 described the results of the statistical analyses conducted to explore the specific research aims and hypotheses. These are now discussed in full below.
9.2 Discussion of Results of Study 1

The purpose of Study 1 was to construct and validate a measure for interpersonal needs and need satisfaction, the Interpersonal Needs Scale (INS). Previous research suggests an important distinction between independence needs; suggesting values for being self-reliant and separate from others, and autonomy needs: which represent the value for acting according to one’s own internalised values (Deci & Ryan, 2002, 2000; Koestner & Losier, 1996; Ryan & Lynch, 1989). The former have been argued to be incompatible with interdependence needs, while the latter are thought to be somehow complementary with needs to belong or be related (Brewer & Roccas, 2001; Harter; Ryan, 1995). However, the relationship of autonomy needs to relatedness needs had not previously been directly explored. The current study also introduced a distinction between covert dependence needs, which are represented in the current study by the negative components of narcissism (entitlement and exploitativeness), and interdependence needs, which have been previously represented as "relatedness" or "belonging" needs. Finally, needs for freedom from others' control have also been identified in previous research as potentially defensive values in interactions with others (Koestner & Losier; Ryan & Lynch).

Reviewing previous research into needs for well-being, the present study proposed five values that broadly represent several perceived relational needs that people may adopt, of interest to the current study. These were: autonomy, being the value for acting according to one's own beliefs and values; relatedness, including values for mutuality, equality, and belonging with others; independence, including needs to be unique and separate from others; control, including needs for freedom from others'
control, and narcissism, including needs for affirmation, admiration and support from others. The pool of items for the INS was therefore based on the proposed values or perceived needs for autonomy, relatedness, independence, narcissism, and control.

9.2.1 Factor analysis on the INS

A factor analysis was performed on the INS Values scores provided by the present sample. Largely in line with expectations, the factor analysis revealed four clear factors. Autonomy Value items, reflecting values for acting according to one’s own beliefs, and Relatedness Value items reflecting beliefs in equality between self and others, combined onto one factor. The underlying value is holding dearly the ideal of “people being true to themselves and each other”. This factor was named “Authenticity Values”, with reference to values for both self and others acting according to personal beliefs or being one’s true self. Similarly, values for helping others and engaging in mutually pleasurable social activities (relatedness values), and being oneself and sharing one’s personal perspective with others (autonomy values) tended to combine, suggesting that actual social behaviours associated with autonomy and relatedness values was the common underlying theme for this factor. To distinguish it from the original relatedness items, this factor was named “Belonging Values”.

Taking these results together, there are several possible interpretations. Firstly, these results suggest that autonomy values, as conceived in the literature, overlap with relatedness values. This would support the argument that these two needs complement each other, or support each others’ satisfaction (Ryan, 1995). On the other hand, perhaps the Authenticity factor items reflect the nature of fully internalised values for autonomy. This could be defined as a conscious awareness of the value for autonomous behaviours
for everyone. Similarly, the Belonging factor seems to capture the nature of being autonomous and related, which could be defined as communicating and engaging with others without the motive for gaining more than mutual experiences and connections. Overall, the Authenticity factor captures the ideals of autonomy and relatedness, while the Belonging factor captures the enactment of these ideals.

The results of the factor analysis clearly supported the expectation that autonomy and independence values would be distinct. There was no crossover between autonomy and independence items, aside from one item that failed to load sufficiently on either the Authenticity or Independence factor. Furthermore, two Control items loaded onto the Independence factor, while none loaded onto either the Authenticity or Belonging factors. These results support previous suggestions that, unlike autonomy, independence values involve ego-defensive motives such as the value for being free from others' control (Ryan, 1995). The remaining three Control items loaded onto the Narcissistic Value factor, giving support to the argument that narcissistic values are also ego-defensive (Morf & Rhodewalt, 1993).

9.2.2 Reliability and validity of the INS

The INS Value and Need Satisfaction subscales achieved satisfactory reliability statistics. Over the whole sample, Authenticity Values had the highest mean score, followed closely by Belonging and Independence Values, with Narcissistic Values having the lowest mean score. This finding is in agreement with previous research that has found autonomy and relatedness values to be rated higher on average than ego-
defensive values (Sheldon et ai, 2001). Mean scores and reliability statistics are reported in Table 6.1.

Validity was explored initially by examining correlations between INS Values subscales, and between Values subscales and Need Satisfaction subscales. It was expected that Authenticity Values (AV) and Belonging Values (BV), comprising the complementary salutogenic values of relatedness and autonomy, would be more strongly positively related to each other than to Independence Values (IV) and Narcissistic Values (NV). The two ego-defensive values, IV and NV, were also expected to be more strongly positively related to each other than to AV and BV. These expectations were supported, lending further support to the argument that IV and NV share a theme of ego-defensiveness. Overall, all interpersonal values were significantly and positively intercorrelated.

Previous researchers have focused on the relationship between need satisfaction and well-being, while recently others are considering values as a potentially important variable in need satisfaction and well-being (Kasser, 2002; Sheldon et ai, 2001). The present study speculated that authenticity and belonging values might contribute to well-being via two mechanisms. Firstly, valuing authenticity and belonging in interpersonal interactions may facilitate the satisfaction of overall interpersonal needs. Results indicated that authenticity and belonging values were positively related to satisfaction of all INS interpersonal needs. These results support previous findings that experiences supporting autonomy and relatedness tend to be more "satisfying" (Sheldon et al). As such, they may contribute to well-being via positive cognitions, affect and behaviours associated with perceived satisfaction of valued needs.
In contrast, independence and narcissistic needs were negatively related to satisfaction of each INS interpersonal need. The negative relationships between IV and need satisfaction were weak but significant, while the relationships between NV and need satisfaction were moderate in strength. This finding supports the idea that IV, and even more so NV, are "unsatisfying" needs, part of a vicious cycle perpetuated by values for unsatisfying ego-defensive needs (Deci & Ryan, 2000).

Secondly, it was proposed that valuing authenticity and belonging needs is salutogenic in itself, even if these values are not fully satisfied. Autonomy and relatedness values are argued to contribute broadly to well-being via an awareness of and value for self-other perceptions and behaviours that should support self-esteem, social integration and overall psychological and social health (Kasser, 2002; Ryan, 1995; Sheldon et al, 2001). At the same time, values for authenticity and belonging may protect against ego-defensive perceptions and behaviours which may compromise psychological and social well-being. The present study also contended that AV and BV indicate interpersonal or social well-being, and should therefore be negatively correlated with alienation. As expected, AV and BV were positively correlated with self-esteem scores, and negatively correlated with alienation and psychological distress scores. These findings indicate that self-reported psychological well-being is associated with high scores for Authenticity and Belonging Values.

In contrast, IV and NV are thought to underlie ego-defensive perceptions and behaviours which compromise psychological and social well-being. In line with predictions, and contrary to both professional and lay assumptions concerning a link between high self-esteem and independence (Eckersley, 2001), IV was uncorrelated with
self-esteem. Reflecting previous findings regarding "individualistic" values (Eckersley & Dear, 2002; Scott, Ciarrochi, & Deane, 2004) and contrary to data suggesting a link between individualism and well-being (Diener, Diener & Diener, 1995) independence values were positively related to alienation and psychological distress. These findings support the distinction between autonomy and independence, and it is possible that previous research in support of the benefits of individualism has confounded the two constructs.

Notably, given the link proposed by some between narcissism and high but fragile self-esteem (e.g. Grannemann & Barclay, 1989; 1992), the raw correlation between NV and self-esteem was negative. Despite the evidence for a positive aspect of narcissism (Emmons, 1987; Raskin & Terry, 1988), the finding that narcissistic values were positively related to psychological distress and alienation, and negatively related to self-esteem, supports the broad definition of narcissism as dysfunctional self-esteem regulation. Narcissists, in their attempts to self-enhance, may be suppressing feelings of low self-worth, and eventually repulsing others with their manipulative behaviour. They may compensate by convincing themselves of their own superiority, yet pay the price in terms of psychological distress and alienation.

Drawing on social cognitive theorists (e.g. Markus & Kitayama, 1991) who argue that cultural and social values help determine self-concept, and on the proposition of SDT researchers that needs for well-being are universal rather than relative to self-concept (e.g. Ryan, 1995; Sheldon et al, 2001) the present study took the position that interpersonal values would be related to self-concept, and that there may be a relationship between the make-up of self-concept and well-being. The initial results from Study I
supported this hypothesis, showing that authenticity and belonging values were positively related to both autonomous and interrelated self-concepts. The results suggest that each of these two values supports both the autonomous and related self. The correlation between authenticity values and autonomous self, and that between belonging values and interrelated self, were stronger than other relationships. This suggests that the conscious, internalised value of autonomy and equality; Authenticity, represents a closer relationship to the "autonomous" self as defined by Deci and Ryan (2000) compared to the behavioural aspects of being autonomous and related; Belonging, which more closely reflects the "interrelated self" as defined by Cross and her colleagues (Cross, Bacon & Morris, 2000). In line with predictions, there was virtually no raw correlation between salutogenic values and independent self-concept, or the self-sufficiency and entitlement subscales of the NPI.

Independence and narcissistic values were virtually uncorrelated with all self-concept measures, with the exception of moderately positive relationships between both IV and NV, and NPI Entitlement, and a moderately negative relationship between NV and NPI Self-sufficiency. This finding that ego-defensive values were not related to independent self-concept was unexpected, but as expected IV and NV were related to both "positive" and "negative" aspects of narcissism. Despite values for being independent and superior respectively, both IV and NV may indicate covert interpersonal needs in terms of a sense of entitlement, and for NV; a perceived lack of self-sufficiency.

Previous results from Study I indicated that IV and NV represent unsatisfying needs that block their own satisfaction, thereby perpetuating themselves (Deci & Ryan, 2000). Perhaps this is why they do not contribute strongly to a sense of self. For example,
someone who values independence also tends to perceive that this need is not satisfied, and therefore may not identify themselves as an independent person. Reflecting their dissatisfaction, they identify with a sense of entitlement to get what they want. Similarly, a person with a relatively strong value for admiration and attention from others also tends to perceive that this need is not satisfied, and this is reflected in both a sense of entitlement and in perceived low self-sufficiency.

Overall, these results are intriguing. They give some support to the argument that values are related to self-concept, but apparently only if these are salutogenic values. However, these interpretations are limited to consideration of raw correlations and do not provide a very rich or detailed picture of the relationship between interpersonal needs, need satisfaction, and self-concept.

In all, the results of Study I provided strong support for the validity of the Interpersonal Needs Scale based on four dimensions of perceived interpersonal needs or values: the two salutogenic values of authenticity and belonging, both combining autonomy and relatedness values, and the two ego-defensive values of independence and narcissism, both including control values. Salutogenic values were positively related to each other, to need satisfaction, to self-esteem, and to autonomous and interrelated self-concepts, and negatively related to distress and alienation. Ego-defensive values were likewise related to each other, but in contrast to salutogenic values, they were negatively related to need satisfaction, largely uncorrelated with self-esteem and self-concept, and positively related to psychological distress and alienation.
9.3 Discussion of Results for Study 2

This thesis argues that understanding relationships between interpersonal needs and well-being depends on how much each interpersonal need is valued (the valency of needs), and whether or not valued needs are perceived as being satisfied. Study 2 extended the results of Study 1 by further exploring the relationships between the identified interpersonal needs of authenticity, belonging, independence and narcissism, giving a more detailed analysis of the dynamics of these needs and their relationship with self-concept and well-being, by considering how interpersonal need profiles varied between distinct groups of people.

Autonomy and relatedness needs are argued to be complementary salutogenic needs that tend to be satisfied, while independence and narcissism are ego-defensive needs that tend to be unsatisfied (Deci & Ryan, 2002; Kasser, 2002; Ryan, 1995). However, like all psychological variables, interpersonal needs and their satisfaction are subject to individual differences (Pyszczynski, Greenberg & Solomon, 2000). Accordingly, the present research assumed that while some participants can be expected to report that they value salutogenic needs more than other needs and perceive that these needs are met, some who value salutogenic needs more than ego-defensive needs may not report their salutogenic needs to be fully satisfied. Similarly, some participants with relatively high values for ego-defensive needs were expected to report that these needs were not satisfied, however others with relatively high values for ego-defensive needs may report that these needs are satisfied (temporarily at least). Furthermore, it was speculated that while narcissistic values may overlap with independence values for some, others with independence values may report little need of others overall. A statistical
clustering method was used to divide the sample into groups according to differences in mean INS value need satisfaction scores, resulting in five distinct groups that closely resembled predicted INS value and need satisfaction patterns.

9.3.1 Patterns of Interpersonal Values and Need Satisfaction

9.3.1.1 Self-other Balanced

As predicted, the resultant groups included one group of participants (N=42) who reported that they valued salutogenic needs to a greater degree than ego-defensive needs, and that their needs were satisfied. This group was labeled the Self-other Balanced group, with reference to equivalence of values for the needs of the self and others.

The Self-other Balanced group had roughly equivalent and relatively high mean AV and BV scores, and both AV and BV mean scores were significantly higher than the mean Self-other Balanced IV and NV scores. For this group, the mean AV score was significantly greater than those for the Slightly Lonely group and the Individualists, and the mean BV score was significantly greater compared to Individualists. The mean IV score was significantly less compared to both Narcissistic groups, and finally the mean NV score was significantly less compared to each other group except for Individualists.

The Self-other Balanced group also reported high satisfaction for each INS need, giving the lowest interpersonal neediness on average compared to each other group, according to each INS discrepancy score. Mean discrepancy scores were significantly lower than all other groups, except for the Authenticity Discrepancy (AD) comparison with Satisfied Narcissists, and the Belonging Discrepancy (BD) comparison with Individualists. This last comparison should be interpreted in light of the Individualists'
reporting both low mean BV and BS scores, which indicates that despite reporting low belonging need satisfaction, Individualists do not value belonging very highly, and therefore do not perceive themselves as lacking in their belonging needs. All discrepancy scores except AD were less than zero, indicating that Self-other Balanced tend to be more than satisfied that their interpersonal needs were being met.

9.3.2.2 Slightly Lonely

As predicted, a second group reported a similar pattern of need valencies to the Self-other Balanced group, but some dissatisfaction of salutogenic needs. Based on the largest need discrepancy, between the mean belonging value and belonging need satisfaction scores (belonging neediness), this group was labeled Slightly Lonely (N=53).

Like the Self-other Balanced group, the Slightly Lonely group reported roughly equivalent mean AV and BV scores, which were significantly higher compared to their mean IV and NV scores, and as predicted there were significant differences between all interpersonal values and need satisfaction scores.

Results of between-groups comparisons for the Slightly Lonely were also in line with the argument that even when AV and BV are highly valued, if these needs are not fully satisfied there may be an increase in ego-defensive needs as substitutes. While the mean IV score of the Slightly Lonely group was significantly less compared to the Satisfied Narcissists and Needy Narcissists, their mean NV score was significantly greater on average compared to the Self-other Balanced group. These findings suggest that lower satisfaction of authenticity and belonging needs may be linked to increased narcissistic needs. The Slightly Lonely group reported significantly greater mean INS
discrepancy scores compared to the Self-other Balanced group, and the Satisfied Narcissists. However, Slightly Lonely participants reported significantly lower discrepancy scores on average compared to Needy Narcissists for each INS need.

9.3.1.3 Satisfied Narcissists

Previous research has suggested there may be two aspects to narcissism: positive narcissism, with high self-esteem and qualities of leadership, assertiveness and self-sufficiency, and negative narcissism, represented by manipulation and exploitation of others, and a sense of entitlement. The present study considered these aspects of narcissism to be reflected in satisfied and unsatisfied narcissistic needs, respectively. Therefore, two qualitatively different groups with comparatively high narcissistic values were predicted. It was expected that of those with the highest mean NV scores, there would be some who reported that their needs for affirmation and superiority were currently satisfied (Satisfied Narcissists), and some who did not (Needy Narcissists). These expectations were confirmed.

For the Satisfied Narcissists (N=45), average AV, BV and IV scores were roughly equivalent, while NV scores were slightly but significantly less on average in comparison. However, mean NV and IV scores for this group were significantly higher than every other group except the Needy Narcissists.

Satisfied Narcissists reported their narcissistic needs to be fully satisfied, but as predicted there were small but significant discrepancies between all other INS need/need satisfaction scores. This finding supports the position that high independence and narcissistic values, as ego-defensive values, may undermine salutogenic need satisfaction
(Deci & Ryan, 2000), and also agrees with previous research that suggests narcissists value independence (Emmons, 1987; Raskin & Terry, 1988; Rhodewalt & Morf, 1995).

Although the Satisfied Narcissists had relatively strong ego-defensive values, they also had higher mean AV and BV scores than NV scores, and relatively strong salutogenic values compared to other groups. Their mean BV score was significantly greater than each other group except the Self-other Balanced, and their mean AV score was significantly greater than those of the Individualists, but similar to each other group. As predicted, it was the relative valency of values for ego-defensive needs rather than their preferential rating, as well as narcissistic need satisfaction, that identified this group as the Satisfied Narcissists.

For the Satisfied Narcissist group, all mean discrepancy scores were significantly greater compared to the Self-other Balanced group, except the mean Autonomy Discrepancy (AD) score. However, Satisfied Narcissist discrepancy scores were all close to zero, and the differences with Self-other Balanced were magnified given that the latter group’s Belonging Discrepancy (BD), Independence Discrepancy (ID) and Narcissistic Discrepancy (NO) scores were below zero. Satisfied Narcissists reported significantly lower discrepancy scores on average for each INS need compared to the Slightly Lonely and Needy Narcissist groups. Finally, discrepancies were significantly less than Individualists for AD and ID scores. Overall, the Satisfied Narcissists reported relatively little interpersonal neediness.
9.3.1.4 The Needy Narcissists

The group with unsatisfied narcissistic needs, the Needy Narcissists ($N=81$), also reported higher valency of ego-defensive needs compared to the Self-other Balanced and Slightly Lonely groups. The mean NV score for the Needy Narcissists was greater than every other group except Satisfied Narcissists. Notably, the mean IV score was significantly greater than all other groups. The mean AV score was significantly greater compared to Individualists, and the mean BV score was significantly less than that of the Satisfied Narcissists.

The results suggest that unsatisfied ego-defensive needs indicate a global perception of unsatisfactory interpersonal interactions. As predicted, there were significant differences between all INS value scores and need satisfaction scores. The Needy Narcissists had significantly higher reported interpersonal neediness for all interpersonal needs compared to all other groups. These results support the argument that ego-defensive needs are less satisfying than autonomy and relatedness needs (Sheldon et al) and undermine salutogenic need satisfaction (Oeci & Ryan, Ryan, 1995).

Like the Satisfied Narcissists, the Needy Narcissists also valued independence highly. This result supports the evidence for a common theme of defensiveness for these values. Unlike Satisfied Narcissists, the independence neediness of Needy Narcissists indicates perceived lack of freedom and control in relation to others. This finding of "independence neediness" supports previous suggestions that negative aspects of narcissism include perceptions of control or manipulation by others, and may arise from unsatisfied needs for self-enhancement (Rhodewalt & Morf; Rhodewalt & Tragakis, 2003).
9.3.1.5 Individualists

Finally, there was a fifth group, the Individualists, who reported independence and authenticity values, but little value for narcissistic or belonging needs. Individualists had IV scores that were significantly greater compared to all other INS values scores, and AV scores that were significantly greater than their BV and NV scores on average. Overall, all of their mean INS scores were low compared to other groups, with the exception of the mean NY score which was roughly equivalent to that of the Self-other Balanced group. These results were in line with predictions.

While Individualists reported comparatively low mean INS needs scores on average, which reduced their INS value/need satisfaction discrepancies, they nevertheless reported clearly unmet needs for Independence and Authenticity. As expected, there were relatively large and significant discrepancies between IV and IS, and between AV and AS, and these discrepancies were significantly greater compared to those of the Self-other Balanced and Satisfied Narcissists. On the other hand, Individualists reported significantly lower authenticity, belonging and narcissistic discrepancies on average compared to the Needy Narcissists, and also a significantly lower belonging discrepancy mean score compared to the Slightly Lonely group. As predicted, Individualists reported little need for others overall, but also little satisfaction of needs in interpersonal interactions. Again, these results can be interpreted to support the broad argument the ego-defensive needs tend to be unsatisfying and undermine salutogenic need satisfaction: in this case, authenticity needs. However, for Individualists, independence needs do not seem to overlap with narcissistic needs. Overall, these results indicate that the dominant
perceived needs of individualists are to be free of others and to be one's true self. Perhaps they believe freedom from others' influence is necessary in order to be true to oneself. For this group, being true to oneself is not linked to a need to share experiences with others.

9.4 Self-concept

For social-cognitive researchers, perceptions of needs are partly based on self-concept, which is in turn informed by social values (Markus & Kitayama, 1991). Despite the focus on finding evidence that certain needs are universal for human well-being, and are not relative to self-concept or social values, self-concept is a largely neglected variable in SDT research. The present study explored the components of self-concept according to each group, in order to cast light on the relationship between values, satisfied needs, and self-concept. The overall hypothesis concerning self-concept was that the composition of self-concept would be related to the valuing and satisfaction of particular interpersonal needs. The self-concepts of interest included the autonomous self, the interrelated self, the independent self, and narcissistic components of personality. Narcissism, as a complex construct, was broken down into the "positive" components of self-sufficiency and authority, reflecting strengths for leadership and assertiveness; and the "negative" aspects of entitlement and exploitativeness, reflecting high expectations for what is due to the self, and manipulative or coercive attitudes respectively (Emmons, 1987; Raskin & Terry, 1988).

Given that autonomy and relatedness are proposed to be complementary needs for growth and development (Ryan, 1995), the optimal or healthy self was proposed to be
one that is created according to the valuing and satisfaction of the two salutogenic needs. Previous SDT researchers have focused on self-determination, defined as choicefulness in one’s actions and responsibility for the same, as representing the healthy self supported by basic need satisfaction. This focus has been to the exclusion of considering the interpersonal aspects of self (Andersen, Buunk & Aukje, 2000; Chen & Carter, 2000; Cross, Morris & Gore, 2002). The current study speculated that the healthy self, supported by satisfaction of autonomy and relatedness needs, would have high levels of both self-determination and interdependence in the make-up of self-concept. The positive aspects of narcissism; self-sufficiency and authority, were also expected to be present in the make-up of self-concept for the healthy self, unlike the negative aspects. According to this formulation, the Self-other Balanced group best represents the healthy self. A similar outcome was expected for those who value salutogenic needs but perceive these to be not fully satisfied; the Slightly Lonely group. However, on average, the strength of self-determination and interrelatedness in the self-concept for the Slightly Lonely group was expected to be attenuated by their compromised salutogenic need satisfaction.

Ego-defensive values for independence and narcissism were expected to support independent and narcissistic aspects of self, especially if these needs are satisfied. More specifically, the present study predicted that satisfied narcissistic needs would reflect the positive aspects of narcissism, while unsatisfied narcissistic needs would reflect the negative aspects. Therefore, it was expected that the satisfied ego-defensive needs of Satisfied Narcissists would reflect stronger components of independence, self-sufficiency and authority in the self-concept relative to the first two groups.
Given their relatively large authenticity and belonging discrepancies compared to the Self-other Balanced, Slightly Lonely and Satisfied Narcissist groups, Needy Narcissists were expected to report lower autonomous and interrelated self scores than the former three groups. The relatively highly valued but unsatisfied ego-defensive needs of Needy Narcissists also suggest a relatively strong independent self-concept, although to a lesser extent compared to Satisfied Narcissists, and also narcissistic entitlement and exploitation.

Finally, it was expected that the Individualists, with valued but unsatisfied independence needs, would also report a low mean independent self-concept. Reflecting their unsatisfied authenticity needs and unvalued belonging needs, they were also expected to report low scores on average for the autonomous self and the interrelated self. Based on the findings of Study 1 that independence values were positively related to narcissistic entitlement, and also on the expectation of unsatisfied ego-defensive needs of Individualists, it was further speculated that Individualists would also have comparatively high narcissistic entitlement and exploitation scores, and low self-sufficiency and authority scores, on average.

### 9.4.1 Self-other Balanced

As predicted, the Self-other Balanced group had the highest mean autonomous-self score. This score was significantly higher than those for all other groups except Satisfied Narcissists. Unexpectedly, the mean relational-self score for Self-other Balanced was less than the autonomous-self score, and similar to those of the other groups with the exception of the Individualists, who reported a significantly lower relational-self score compared to the Self-other Balanced group. Supporting predictions,
both autonomous- and relational-self mean scores were greater than the independent-self mean score.

Overall, these results support the contention that the healthy self involves a sense of self-determination or autonomous-self, as well as self-definition in terms of relationships with others, and that these components of self-concept are stronger than the component of the independent self. However, given that the Self-other Balanced group was the only one to report a predominantly autonomous self-concept, and that there was little difference between groups in relational-self scores, it appears that the degree of self-determination in the self-concept is a more reliable indicator of the healthy self than the equivalence of autonomy and relatedness in the self-concept. Finally, these results are in line with the proposition that valued and satisfied relatedness needs support the autonomous self (Ryan, 1995). In other words, being related to others may support a sense of personal choice over and ownership of one's actions.

In terms of the positive narcissistic components of authority and self-sufficiency, the Self-other Balanced group scored highly. Their mean authority score was significantly higher than all other groups except that of the Satisfied Narcissists, their mean self-sufficiency score was significantly higher than those of the Slightly Lonely and Needy Narcissist groups, while this comparison with the Individualists approached significance. The mean entitlement score was lower than every group except the Individualists, and significantly lower compared to the Narcissist groups. There were no significant differences in mean exploitativeness scores between the Self-other Balanced and other groups. People in this group reported having the positive components of narcissism to a greater degree than the negative components, on average. While the Self-
other Balanced group reported that they were more than satisfied in terms of ego-defensive interpersonal needs, they also reported relatively low ego-defensive values (in comparison to their own and other groups' values). Therefore, these results are interpreted to mean that their sense of self-sufficiency and authority is achieved through valued and satisfied salutogenic needs, rather than satisfied ego-defensive needs.

### 9.4.1 Slightly Lonely

Unsatisfied autonomy and relatedness needs were expected to undermine the autonomous and related self-concept for the Slightly Lonely group, and this group did report a significantly lower autonomous-self score compared to the Self-other Balanced group. However, there was no difference across the groups in relational-self scores. The Slightly Lonely group had equivalent mean autonomous- and interrelated-self scores, which like the Self-other Balanced, were higher than the mean independent-self score. Taken together, these results support the interpretation above that the degree of autonomy in the self-concept is a more reliable indicator of satisfied salutogenic needs than is the degree of interrelatedness.

The Slightly Lonely group had mean authority and self-sufficiency scores that were significantly less than those of Satisfied Narcissists, but significantly greater than those of Needy Narcissists. Mean exploitativeness and entitlement scores were slightly higher compared to Individualists and Self-other balanced, although these differences were not significant. Overall, the Slightly Lonely sit somewhere in the middle compared to other groups on each component of narcissism, in line with predictions for the contribution of partly satisfied salutogenic needs to the positive aspects of narcissism.
9.4.3 *Satisfied Narcissists*

The present study argued that the relatively high ego-defensive values of Satisfied Narcissists may contribute to a relatively high independent-self score. As expected, they did have the highest independent-self mean score, and the differences in independent-self mean scores between this group and all other groups, except the Self-other Balanced, were significant. This result indicates that satisfied narcissistic needs are associated with an independent sense of self, supporting previous findings (Gaertner et al, 2002). Unexpectedly, there was little difference in autonomous-self and relational-self mean scores between Satisfied Narcissists and the Self-other Balanced group. Like the Slightly Lonely group, Satisfied Narcissists reported equivalent mean scores for autonomous-self and interrelated-self. Therefore, the possible contribution of satisfied narcissistic needs to the autonomous-self and relational-self cannot be ruled out.

In line with predictions, Satisfied Narcissists reported a significantly greater mean authority score compared to every other group, and a significantly greater self-sufficiency score compared to every other group, except the Self-other Balanced. Against predictions, the Satisfied Narcissists reported the highest mean exploitation score of all groups; this score was significantly higher compared to the Self-other Balanced and Individualists. Their mean entitlement score was greater than every other group except the Needy Narcissists, and significantly higher compared to the Self-other Balanced. In comparison to results for the Self-other Balanced, it appears that satisfied salutogenic needs support only the positive aspects of narcissism, while satisfied ego-defensive needs contribute to each component of narcissism. This interpretation supports the view that
satisfied narcissists meet their needs through manipulation of others, suggesting that their perceived self-sufficiency and independence may only be a false sense of self-reliance, and that they may believe themselves to be entitled to meet their needs at the expense of others.

### 9.4.4 Needy Narcissists

As expected, the Needy Narcissists reported a significantly lower mean autonomous-self score compared to all other groups except the Individualists, and a lower mean independent-self score compared with the Satisfied Narcissists, although this difference was not significant. However, the mean interrelated-self score was similar to those of the preceding groups, and uniquely for Needy Narcissists, the relational-self score was higher than the mean autonomous-self and independent-self scores. Also in line with predictions, Needy Narcissists reported mean authority and self-sufficiency scores that were significantly lower than every other group except for the Individualists.

Against predictions, the mean exploitativeness score for Needy Narcissists was less on average than each other groups, and significantly less than the Satisfied Narcissists. As predicted, the mean entitlement score was the highest of all groups, and significantly greater compared to the Self-other Balanced and the Individualists. Needy Narcissists, with their unsatisfied interpersonal needs, appear to have a high sense of entitlement towards others on average, but describe themselves as less exploitative than the Satisfied Narcissists. Perhaps they are less able to manipulate others to fulfill their needs. Taken together, the results for the two narcissistic groups indicate that for those
who value narcissistic needs relatively highly, narcissistic need fulfillment is linked to all aspects of narcissism, both positive and negative.

### 9.4.5 Individualists

As predicted, and reflecting poor autonomy need satisfaction, Individualists scored the lowest autonomous-self scores on average; significantly lower than all other groups except the Needy Narcissists. Reflecting their low value for belonging, Individualists reported a significantly lower mean relational-self score compared to each other group. Although Individualists valued independence the most compared to other values, the average independent-self score for Individualists was less than any other group, and significantly less than Satisfied Narcissists. These results suggest that fulfilled needs for authenticity and belonging contribute to an autonomous self-concept, while independence and authenticity values, when unfulfilled, do not.

Like the other groups, and against expectations, the mean independent self-concept score of the Individualists was lower compared to the mean autonomous-self and relational-self scores. Like the Self-other Balanced and Slightly Lonely groups, Individualists’ mean autonomous-self and relational-self scores were similar. In terms of narcissistic aspects of self-concept, Individualists had a significantly lower mean authority score compared to each other group except Needy Narcissists, and the lowest mean self-sufficiency score, but only the comparison with Satisfied Narcissists was significant. These results support the argument that independence and autonomy needs do not contribute to the positive components of narcissism unless they are satisfied. In other
words, despite Individualists reporting little need of others, they do not seem to be very self-sufficient nor do they have a strong sense of their own leadership or assertiveness.

The mean exploitativeness score for Individualists was lower than every group, although these differences were not significant, and the mean entitlement score was lower than every other group except the Self-other Balanced, and significantly lower compared to the Needy Narcissists. These results go against the speculation that Individualists may have covert, manipulative needs for others, but fits with the expectation that not all of those who value independence are also narcissistic, and the social isolation of those who do not value belonging highly.

Finally, it is notable that all mean self-concept scores for Individualists tended to be low relative to other groups. This may suggest a comparatively poor or ambiguous sense of self overall for those who report low overall interpersonal values, and little value for belonging needs in particular. This interpretation is in line with the general proposition of many personality theorists who propose that satisfying self-other relationships are vital to the growth and development of a sense of identity or "self" (e.g. Erikson, 1968; Guidano, 1987; Hewitt, 1988; May, 1977; Rogers, 1981; Sullivan, 1968).

9.4.6 Overall results for self-concept

Overall, the stand-out result for the analysis of self-concept variables by group is that satisfied needs seem positively linked to the strength of the autonomous-self, defined as self-awareness and a sense of choicefulness. Autonomous-self scores reflected the overall amount of interpersonal neediness in each group, from the Self-other Balanced with the highest mean autonomous-self score and the highest overall need satisfaction, to
the Needy Narcissists with the lowest mean autonomous-self score and the lowest overall need satisfaction. There was little difference in independent-self or interrelational-self scores between groups, with the exception of the Individualists, who reported a significantly lower relational-self score than each other group. Given that the Individualists are unique amongst the five groups for their low belonging and narcissistic values, and that the interrelational-self varied little according to interpersonal neediness, the results indicate that belonging and narcissistic values may be enough by themselves to support the relational self-concept. Finally, results for the components of narcissism were mostly in line with expectations, although between-groups differences were generally small.

However, these results should be treated with caution. While self-concept scores were standardised to aid comparisons, the measure of independent-self, the Autonomy subscale of the Adjective Checklist (ACL-A), was presented to participants in a very different format to the Likert-type scales used to measure the autonomous and interrelated selves. Therefore, ACL-A scores may be only somewhat comparable to the other self-concept measures, and only limited conclusions can be drawn from examining the within-groups make-up of self-concept.

Finally, these results should be interpreted in light of the present sample being predominantly of Western cultural extraction. The majority of participants identified themselves as belonging to Western culture, and most identified their nationality as Australian or American.
9.5 Well-being

To find evidence that well-being is created by a balance between authenticity and belonging values and the satisfaction of these needs, the next series of hypotheses explored differences in well-being between groups. Both interpersonal values and need satisfaction have been argued to have a pervasive impact on both psychological and social or interpersonal well-being. The first analysis concerning well-being considered the impact of INS values and need satisfaction on social well-being in terms of alienation from self, others, society, and family. Overall, it was expected that those with fulfilled salutogenic needs for authenticity and belonging would have healthy relationships with both themselves and with others, and would report low alienation scores. Those with unfulfilled salutogenic needs would report some degree of alienation from self, others, society and family. Satisfied ego-defensive needs for narcissism and independence would also contribute to some degree to alienation, given that these needs are argued to undermine healthy self-other relationships. Those with unfulfilled ego-defensive needs and lack of value for salutogenic needs were expected to report the greatest degree of alienation overall. Furthermore, the greater the degree of unfulfilled needs, the greater the alienation from self.

Differences in psychological well-being between groups was further explored by comparing levels of reported depression, anxiety, stress and self-esteem. The overall hypotheses concerning differences in psychological wellbeing were as follows: Unsatisfied needs were argued to broadly contribute to psychological distress and undermine self-worth, while satisfied salutogenic needs contribute to self-worth, while protecting against psychological distress. In the optimal position for well-being, occupied
by the Self-other Balanced group, salutogenic needs (AV and BV) are valued highly, and are fully satisfied, while ego-defensive needs are given less value and are also satisfied.

The next level down in the well-being continuum, represented by the Slightly Lonely group, is identical to the first level in terms of the ranking of interpersonal needs, except that salutogenic needs are not being fully satisfied.

The third best condition includes those whose ego-defensive needs are given relatively greater value, yet are being currently satisfied. For these people, Satisfied Narcissists, salutogenic need satisfaction is somewhat blocked or substituted for by the relatively greater value given to ego-defensive needs. Psychological well-being may be apparent for this group, but impairment may be masked by the satisfaction of substitute needs. For example, members of this group were expected to report high self-esteem on average, but when the contribution of narcissism is controlled for, self-esteem was expected to be significantly less compared to the Self-other Balanced group.

The lowest level, the least optimal position for well-being, includes those whose ego-defensive needs are substituting for salutogenic needs to the greatest degree compared to others (Individualists), and also those whose overall needs are not being satisfied (Needy Narcissists). In sum, it was predicted overall that those with satisfied salutogenic needs will report the highest level of well-being compared to those with unfulfilled salutogenic needs, fulfilled ego-defensive needs, and unfulfilled ego-defensive needs or unvalued salutogenic needs, in roughly descending order.
9.5.1 **Self-other Balanced**

As expected, the Self-other Balanced group had the lowest alienation subscale scores compared to every other group. Self-other Balanced mean alienation subscale scores were significantly lower compared to those of each other group except Satisfied Narcissists. However, the alienation from society comparison with the Satisfied Narcissists approached significance. These results support the argument that valued and satisfied salutogenic needs indicate low levels of alienation, or good social well-being, overall. As expected, the Self-other Balanced group had the lowest mean Depression, Anxiety and Stress (DAS) scores compared to the other groups, however the differences with the Satisfied Narcissist mean DAS scores were not significant. As predicted, the Self-other Balanced mean self-esteem score was significantly higher than every other group, when the contribution of narcissism to the self-esteem of Satisfied Narcissists was controlled for. Overall, these results support previous evidence that valued and satisfied salutogenic needs contribute broadly to psychological well-being, including positive self-evaluation and social adjustment (e.g. Deci & Ryan, 2000, Ryan & Brown, 2002; Sheldon et al).

9.5.2 **Slightly Lonely**

As predicted, the Slightly Lonely group reported a moderate level of alienation compared to the other groups. They reported significantly higher mean scores for each alienation subscale compared to Self-other Balanced, and each mean subscale score was greater compared to Satisfied Narcissists, but none of these differences were significant. All Slightly Lonely mean alienation subscale scores were significantly less compared to
the remaining two groups. These results suggest that unsatisfied salutogenic needs contribute to each aspect of alienation to a moderate degree. As expected, the Slightly Lonely group reported significantly higher mean depression, anxiety and stress scores compared to the Self-other Balanced group. There were no significant differences in mean DAS scores compared to the Satisfied Narcissists, but the Slightly Lonely group reported a significantly lower mean depression score than both the Needy Narcissists and the Individualists, and a significantly lower mean stress score than the Needy Narcissists. They also reported a mean self-esteem score that was significantly lower compared to Self-other Balanced and Satisfied Narcissists, and significantly higher compared to Needy Narcissists. Together, these results indicate that valued but unsatisfied salutogenic needs are linked with moderate levels of psychological distress.

9.5.3 Satisfied Narcissists

As predicted, the Satisfied Narcissists reported significantly lower mean alienation subscale scores compared to the Needy Narcissists and the Individualists. While comparisons with the Self-other Balanced group were in the predicted directions, differences were not significant. The Satisfied Narcissists report some degree of alienation towards others and society, but little alienation towards themselves. The Satisfied Narcissists reported significantly lower mean depression and stress scores compared to the Needy Narcissists and the Individualists, and a significantly lower mean anxiety score compared to the Needy Narcissists and the Slightly Lonely group. They also reported a mean self-esteem score that was significantly greater compared to every other group except Self-other Balanced.
There was little evidence that the relatively highly valued and satisfied ego-defensive needs of the Satisfied Narcissists compromise well-being. Compared with the findings for the Slightly Lonely group, it appears that unsatisfied salutogenic needs compromise well-being to a greater degree than satisfied ego-defensive needs. However, there was some evidence that the Satisfied Narcissists deceive themselves in terms of self-reliance and self-esteem, and they consistently rate lower compared to the Self-other Balanced group on well-being measures. Furthermore, if Satisfied Narcissists fulfill their needs at others’ expense, their need satisfaction is vulnerable to the potential refusal of others to be exploited.

9.5.4 Needy Narcissists

Results for the Needy Narcissists were in line with expectations. They reported significantly greater mean alienation from self, society and family subscale scores compared with every other group except the Individualists, and a significantly greater mean alienation from others score compared with the Self-other Balanced and Satisfied Narcissist groups. As expected, they reported a greater mean alienation from self score compared to Individualists, although this difference was not significant. Unexpectedly, Needy Narcissists also reported a higher mean alienation from society score than the Individualists, although again this difference was not significant. These results indicate that unfulfilled salutogenic and substitute interpersonal needs are linked with very high and pervasive alienation, suggesting broadly cynical attitudes towards the value of social participation, involvement with family, and to self-knowledge.
As predicted, the Needy Narcissists also reported a significantly higher mean stress score than every other group, a significantly higher mean depression score than every other group except Individualists, and a significantly greater mean anxiety score than the Self-other Balanced and Satisfied Narcissist groups. The Needy Narcissists reported significantly lower self-esteem scores on average than every group except the Individualists.

Overall, these results are contrary to previous findings that those narcissists with the highest self-esteem have the most cynicism towards others (Rhodewalt & Morf, 1995). In the present study, it is the unsatisfied narcissists who report both low self-esteem and high alienation scores, compared to the satisfied narcissists with high self-esteem and low alienation scores. While ANCOVA reduced the mean self-esteem scores of the Satisfied Narcissists, suggesting that their self-esteem is related to narcissism, the adjusted score remained relatively high. It appears that when narcissistic needs are met, self-esteem is high and cynicism towards others is low, despite the sense of entitlement and exploitativeness of Satisfied Narcissists. Perhaps Satisfied Narcissists value social participation for the opportunities it affords for them to meet their interpersonal needs, albeit at others’ expense. In contrast, unsatisfied needs are linked with psychological distress, alienation and low self-esteem.

9.5.5 Individualists

As predicted, the Individualists reported significantly greater mean alienation subscale scores compared to every other group except the Needy Narcissists. As predicted, the Individualists reported a slightly lower mean alienation from self score
compared to the Needy Narcissists, but unexpectedly they also reported a slightly lower mean alienation from society score compared to Needy Narcissists. These results indicate that the Individualists, who report a low need of others, are slightly less alienated from society compared to those who are pervasively dissatisfied with all interpersonal interactions; the Needy Narcissists. Finally, as expected, Individualists reported higher mean alienation from others and family scores compared to Needy Narcissists, although these differences were not significant. The Individualists have significantly lower self-esteem and significantly greater stress and anxiety scores on average compared to the Self-other Balanced and Satisfied Narcissists, and a significantly greater depression score compared to all other groups except Needy Narcissists.

9.5.6 Overall results for well-being

The results for the Needy Narcissists and the Individualists are striking. Individualists feel strongly alienated overall, particularly towards others in general. To some degree, perhaps Individualists "fit" in an alienating society, because their beliefs about society are in line with their perceived low interpersonal needs. In other words, they hold strongly negative attitudes towards society and expect little from others, in terms of interpersonal needs. In contrast, the Needy Narcissists had high values for all INS needs, and strongly perceived that their interpersonal needs were not satisfied. Their high alienation scores could be explained by cynicism towards those who have not satisfied their needs, perhaps because Needy Narcissists fail to effectively exploit others.

Considering all groups together, alienation and psychological distress seem more strongly related to need satisfaction than to values. For example, looking at the pattern for the alienation from self scores, Individualists value authenticity only slightly less than
independence, and Needy Narcissists value authenticity highly, yet both groups reported very high alienation from self scores. In contrast, the Self-other Balanced reported high authenticity values and low alienation from self scores. The Satisfied Narcissists, with a small degree of authenticity neediness, are only slightly more alienated from themselves compared the Self-other Balanced, and the Slightly Lonely, with a moderate degree of authenticity neediness relative to the other groups, reported higher alienation from self scores again. These results suggest that holding values for being one's true self around others does not preclude being cynical about the worth of self-awareness, unless the authenticity need is satisfied.

Similarly, the highest depression, anxiety and stress scores were reported by the group with the greatest neediness: the Needy Narcissists, followed by the Individualists, the Slightly Lonely, the Satisfied Narcissists, and the Self-other Balanced, in descending order of psychological distress, and ascending order of need satisfaction. These results largely support the overall predictions for well-being, except that the Satisfied Narcissists reported greater well-being in comparison to the Slightly Lonely. This result goes against the expectation that the higher ego-defensive values of the Satisfied Narcissists would compromise their well-being to a greater degree compared to the effects of the unsatisfied salutogenic needs of the Slightly Lonely. Finally, the two most satisfied groups, the Self-other Balanced and Satisfied Narcissists, reported the highest self-esteem scores, even after controlling for the effects of narcissism.

Overall, the results indicate that need satisfaction has a greater impact on well-being than the relative strength of the different types of values. However, there is evidence that need satisfaction is linked to the relative strength of the different types of
values. Higher ego-defensive values are linked to greater interpersonal neediness overall, even for the Satisfied Narcissists. Those with low values for interpersonal needs overall, the Individualists, also reported lack of satisfaction for valued needs, and compromised well-being comparable to the Needy Narcissists.

9.6 Social anxiety

The sample for the present study included 82 respondents (32% of the total sample) who reported a diagnosis of social anxiety within the past two years. Social anxiety reflects a fear of negative evaluation from others and avoidance of social situations. In terms of the current study, social anxiety may reflect unsatisfied interpersonal needs in general, and unsatisfied needs for positive evaluation or appreciation from others in particular. It was therefore proposed that the Needy Narcissists, with highly valued but unsatisfied ego-defensive needs, may be vulnerable to social anxiety. In contrast, it was expected that the Individualists and Slightly Lonely groups, who reported less interpersonal neediness and lower NV mean scores than the Needy Narcissists, would not be prone to social anxiety.

Satisfied autonomy and belonging needs were expected to diminish interpersonal dysfunction such as social anxiety, while satisfied narcissistic needs are linked with inflated self-esteem and should also reduce social anxiety. These expectations were supported. There was no significant difference in the expected and actual count of social anxiety cases for the Slightly Lonely and Individualists, but Self-other Balanced and Satisfied Narcissists had significantly fewer than expected cases, while Needy Narcissists had significantly more. Approximately half the respondents in the Needy Narcissist group had reported a diagnosis of social anxiety in the past two years.
It may be that the high overall interpersonal neediness of the Needy Narcissists accounts for their high proportion of respondents with social anxiety. The Needy Narcissists are not satisfied that they can be their true selves, free from others' control, appreciated by others, and in equal relationships with others. This pervasive dissatisfaction could lead to the apprehension of dissatisfaction in future interactions, causing anxiety in social situations and social avoidance. Social avoidance limits opportunities to satisfy needs, perpetuating dissatisfaction.

On the other hand, the Needy Narcissists reported significantly greater ego-defensive value scores on average compared to the Slightly Lonely and Individualists. Comparison of narcissistic value and need satisfaction scores showed that Needy Narcissists with a diagnosis of social anxiety had a slightly but significantly lower mean score for narcissistic need satisfaction compared to those without a diagnosis. Taken together, these results indicate that ego-defensive values and need satisfaction in particular are linked to social anxiety.

A further criteria for social anxiety is fear of negative evaluation by others. The Needy Narcissists alone reported a predominantly interrelational-self, suggesting that the Needy Narcissists are strongly affected by qualities of relationships. They also reported low self-worth and high alienation and entitlement compared to others. This suggests that Needy Narcissists are strongly influenced in their sense of self and self-evaluation by their relationships with others, but in a negative way. Their dissatisfaction in relationships with others, combined with the importance of relationships with others in their self-definition, may lead Needy Narcissists to compare themselves unfavourably with others in terms of self-worth, and yet to also have cynical, negative expectations of others in general. This
interpretation agrees with previous findings that narcissists' self-esteem is linked to
perceptions of success or failure in social interactions, and that unsatisfied narcissistic
needs may produce hostility towards others (Rhodewalt, Madrian & Cheney, 1998;
Rhodewalt, Tragakis & Hunh, 2001).

Needy Narcissists with social anxiety reported slightly but significantly higher mean
scores for alienation and distress, and lower mean self-esteem scores, compared to Needy
Narcissists without social anxiety. Perhaps the fear of negative evaluation in social
anxiety is related to both negative self-evaluation, and negative evaluation of others in
terms of alienated social attitudes and a sense of entitlement. The link between low self-
esteeem and alienation could be explained by the dominant tendency of Needy Narcissists
to define the self in terms of (negative) relationships with others, over autonomous self-
definition based on awareness of personal beliefs and a sense of personal choice. Overall,
the results of the social anxiety analysis suggest that the exploration of interpersonal
values and perceived satisfaction of needs, and attitudes such as entitlement and
alienation, could help identify beliefs associated with social anxiety, and therefore be an
important part of therapy.

9.7 General Discussion

In terms of grasping the subtleties of need dynamics and their relationship to well-
being, the present study has achieved some success. There appears to be fairly strong
positive relationships between overall interpersonal need satisfaction and well-being.
However, results for the effects on well-being of salutogenic versus ego-defensive values
and need satisfaction are less prominent. This suggests that overall need satisfaction is the
stronger determinant of well-being than type of values. This general finding supports the research trajectory in SOT that focuses on need satisfaction rather than values. However, it falls short of supporting the central thesis of SOT: that satisfaction of autonomy and relatedness needs in particular is required for well-being; and the hypothesis that autonomy and relatedness values are salutogenic in themselves (Kasser, 2002; Ryan, 1995). Nevertheless, careful examination of results finds some evidence for the hypotheses that authenticity and belonging values are more salutogenic compared with independence and narcissistic values, and their satisfaction has greater impact on well-being compared to satisfaction of ego-defensive needs.

The results from Study 1 showed that salutogenic values correlated positively with well-being, unlike ego-defensive values. Salutogenic values were more highly valued and more likely to be satisfied than ego-defensive values overall, agreeing with results of previous research that found experiences supporting autonomy and relatedness needs were rated as more satisfying than experiences supporting "extrinsic" needs (Sheldon et al., 2001). Therefore, there is evidence that salutogenic values could contribute to well-being via the facilitation of need satisfaction, and that highly valued ego-defensive needs may undermine need satisfaction (Kasser, 2002; Ryan, 1995).

It also appears that satisfaction of salutogenic needs for well-being supports overall satisfaction with interpersonal needs to a greater extent than the satisfaction of ego-defensive needs. For example, the Satisfied Narcissists, who reported satisfaction of narcissistic needs, also reported some dissatisfaction of salutogenic needs. The Self-other Balanced group, who reported that their authenticity and relatedness needs were fully satisfied, were more than satisfied that their overall interpersonal needs were met. No
group reported satisfaction of salutogenic needs but dissatisfaction of ego-defensive needs. Further comparison of the Satisfied Narcissists and the Self-other Balanced on well-being variables gives evidence that the satisfaction of salutogenic needs also has greater impact on well-being than does satisfaction of ego-defensive needs. The Self-other Balanced had greater self-esteem, less alienation and distress, and they reported a stronger autonomous-self and less narcissistic entitlement, compared to the Satisfied Narcissists. Again, the link between salutogenic values and well-being appears to be greater satisfaction of overall needs.

Against predictions, the highly valued and satisfied ego-defensive needs of the Satisfied Narcissists seem to support well-being to a greater degree compared to the highly valued but unsatisfied salutogenic needs of the Slightly Lonely. The latter reported greater alienation and distress and lower self-esteem than the former. However, the positive aspects of narcissism, including their high well-being status, may hinge on satisfaction of narcissistic needs. If narcissism in essence depicts dysfunctional self-esteem regulation, then failure to satisfy self-enhancing needs could lead to low self-worth, psychological distress and hostility towards others: in other words, Satisfied Narcissists could become Needy Narcissists. There is evidence that the Satisfied Narcissists' high self-esteem was inflated by narcissism, but measuring the stability of Satisfied Narcissists' self-esteem and distress according to the status of perceived self-enhancement need satisfaction would cast further light on their apparent well-being.

The present study aimed to find evidence that when ego-defensive needs are highly valued, salutogenic need satisfaction is compromised, with negative impact for well-being. The evidence for this is stronger when considering the impact of highly
valued narcissistic needs than highly valued independence needs. Every attempt was made to distinguish autonomy values as salutogenic values from independence values as ego-defensive values, and results from Study I supported the distinction. Yet, there was little difference between mean IV and AV scores in the five groups. For example, while the Self-other Balanced group reported for high values for and satisfaction of authenticity needs, they also reported fairly high values for and satisfaction of independence needs. There was no evidence in the profile of the Self-other Balanced to suggest that highly valued independence needs undermined authenticity need satisfaction.

The singular INS profile of the Individualists, including high authenticity and independence values (relative to their belonging and narcissistic values), and unsatisfied independence and authenticity needs, suggests an explanation. It may be that independence and autonomy needs are linked, in that freedom from others' control is a prerequisite for satisfaction of autonomy needs. This interpretation is consistent with the continuum of self-determination, which places autonomous self-regulation at the opposite end of the continuum from external control (Ryan, 1995) and states that the satisfaction of autonomy needs is supported by freedom from external control (Deci & Ryan, 1987).

Results comparing the INS profile of groups to self-concept were inconclusive. Again, overall need satisfaction rather than values appeared to be related to self-concept in terms of the strength of the autonomous-self, and the strength of the positive components of narcissism. All interrelated-self scores were similar with the exception of the Individualists' low interrelated-self score, suggesting that belonging values may be linked to the interrelated-self. There was no support for the proposition that those who
reported equally high and satisfied salutogenic needs, the Self-other Balanced, would have equally strong components of autonomy and relatedness in self-definition.

The results for self-concept are somewhat in agreement with those of previous research which found that self-complexity in terms of strength of multiple self-aspects was related to higher well-being (Hardie, Critchley & Morris, 2006). In the present study, Individualists reported the lowest self-concept scores overall, and amongst the lowest well-being scores. With regards the other groups, the strength of the autonomous self seems related to well-being, but there was little difference between groups according to the strength of the interrelated self. Against previous findings, the self-concept profile of the Slightly Lonely and the Satisfied Narcissists were similar in strength of self-concepts, yet the Slightly Lonely group reported lower well-being than the Satisfied Narcissists on average.

Comparing the group with a predominantly autonomous-self, the Self-other Balanced, with those with the predominantly narcissistic-self, the Satisfied Narcissists, gives some support to the argument that needs for well-being do not depend on predominant self-concept. Satisfied Narcissists value narcissistic needs highly, in line with their relatively strong narcissistic self-definition, and also report these needs satisfied. The Self-other Balanced, who value salutogenic needs most highly, in line with a predominantly autonomous-self, and report their salutogenic needs satisfied. However, compared to the Self-other Balanced, the Satisfied Narcissists have some evidence of dysfunctionality. Of course, this may be simply because the Satisfied Narcissists, unlike the Self-other Balanced, also report some interpersonal neediness.
Finally, the predominantly interrelated-self of the Needy Narcissists does not seem to skew their values towards belonging or narcissistic values. Indeed, they reported the highest independence value mean score. The dominance of the interrelational-self for Needy Narcissists may indicate the importance of relationships with others in self-definition for those who experience profoundly unsatisfying interpersonal interactions, including perceived lack of freedom and control.

9.8 Limitations

Perhaps the most important limitation to interpreting results from the current study is the sheer complexity of the analysis. Considering within-group and between groups differences across many variables means that multiple interpretations are possible. With complex relationships in data, a view of overall patterns is important in order to describe results with any parsimony. In the present study, an attempt was made to identify and describe patterns using statistical clustering methods. This quantitative analysis was chosen to allow natural relationships in the data to be simplified and revealed as distinct group profiles. At each stage of the analysis, differences between these distinct groups have been enriched and detailed with the exploration of different variables according to within-group and between-groups differences. Overall, the results support the hypothesis that the sample could be meaningfully divided according to patterns of INS values and needs scores.

However, comparisons of mean scores between groups precludes any conclusions based on causal or directional relationships between values, need satisfaction and well-being or self-concept, and many alternative interpretations could be made. Differences
between mean INS values scores between groups were for the most part small, and smaller than differences in need discrepancies between groups, giving more support to interpretations based on differences in need satisfaction than those comparing the effects on well-being of salutogenic and ego-defensive needs. Furthermore, a relatively simple method for determining discrepancy scores was chosen in the present study. While this method has yielded strong and interpretable results, other methods could be considered for future research.

The sample consisted of self-selected internet and university student respondents, and acquaintances of the researchers. In particular, efforts were made to access respondents with social anxiety disorder. Furthermore, only fully completed questionnaires were included. For these reasons, some extreme scoring patterns and other systematic differences between the present sample and the normal population could be expected. Therefore, some results of the present study are not generalisable to other populations. For example, it should not be assumed from the sizes of the groups described in the present study that similar proportions of the Self-other Balanced to the Needy Narcissists exist in the population. Rather, it might be assumed that clinical populations would report large interpersonal need discrepancies and associated dysfunction, in comparison to non-clinical populations. The characteristics of the sample may also have made it unlikely that a group of “Satisfied Individualists” would be detected. Perhaps a larger sample size of the general population would reveal such people, although again it would be expected that there would be some compromise to well-being for those who do not highly value belonging needs.
There were some limitations in the present study due to problems with measures. The factor analysis of the INS unexpectedly combined autonomy and relatedness items onto the new authenticity and belonging scales. Underlying themes consistent with the scales’ intentions were identified in the new factors, and results for Studies 1 and 2 seem consistent with the major hypotheses based on autonomy and relatedness needs. However, the INS Authenticity and Belonging Values may not be fully representative of the constructs for autonomy and relatedness. For example, in an interpersonal context, autonomy may include being able to work towards personal goals (Deci & Ryan, 2000), and relatedness may include needs for support or intimacy (Baumeister & Leary, 1995).

The measure for independent-self concept followed a different (and more time-consuming) scoring format compared to other measures. It had borderline reliability and failed to correlate with other measures, casting doubt on the validity of the Independence Value subscale, and therefore the distinction between autonomy and independence values. Problems with the independent-self measure may also explain the failure to obtain expected results for self-concept hypotheses, including the prediction of a predominantly independent and narcissistic self for the Narcissistic groups.

Finally, a clearer picture of the relationship between interpersonal values, need satisfaction, and social anxiety could have been obtained by including a more comprehensive measure of social anxiety, including fear of negative evaluation and social avoidance. Another potentially important component of social anxiety; social competence, was also omitted from the current study. Competence has been identified as a basic need for well-being, no less fundamental than autonomy and relatedness (Deci &
Ryan, 2002), and the decision to focus on the latter needs in no way diminishes the expectation that competence is also an important interpersonal need.

9.9 Future Directions

The present study introduced a new measure, the Interpersonal Needs Scale (INS). While the subscales showed satisfactory reliability and validity, any new measure requires further testing to establish its validity and explore its utility. In particular, the stability of interpersonal values and need satisfaction was not examined. Previous research suggests that values, like goals, tend to be relatively stable over time (Deci & Ryan, 2000; Schmuck, Kasser & Ryan, 2000) however need satisfaction could be expected to vary. The effects of varying need satisfaction on well-being is unknown, but may be linked to the strength of values. For example, research suggests that self-worth is unstable when contingent on satisfaction of self-enhancement needs (Kemis, 2000; Kemis & Paradise, 2002). Therefore, high narcissistic values may indicate fluctuations in self-esteem depending on satisfaction of self-enhancement needs. On the other hand, high salutogenic values combined with low ego-defensive values might act as a buffer against the effects of unsatisfied needs on well-being.

The values explored in the present study are not considered an exhaustive representation of important interpersonal needs. One omission is competency needs, reflecting self-efficacy, social skills, and achievement needs. Competency, considered to
be the third basic need for well-being (Deci & Ryan, 2002), could be expected to play a similar role to autonomy and relatedness in interpersonal needs and well-being. It remains for future research to investigate whether competency values affect the satisfaction of competency needs, and the relationship between unsatisfied competency needs and well-being.

Since most, if not all, disorders include features of interpersonal dysfunction, there are many possibilities for future research into links between interpersonal values, need satisfaction and well-being. Indeed, the relationship between need satisfaction and well-being is strong enough to warrant investigation using a range of clinical measures.

For the current sample, who overwhelmingly identified themselves as belonging to Western culture, it appears that autonomy and relatedness are salutogenic needs, and that a predominantly autonomous self may indicate healthy functioning. However, the argument that needs for well-being are universal requires further testing with non-Western populations. For example, authenticity or genuineness in interpersonal interactions may be a Western value, given that members of interdependent cultures may be less apt to define themselves in terms of a private self (Markus & Kitayama, 1995), and therefore may not recognise a need to share the "authentic" self with others.

Independence values for the current sample did not strongly indicate dysfunction. However, nor did they seem to be linked to well-being. For the present sample, independence values may reflect culturally-derived values for personal freedom held by participants, rather than needs for well-being. It remains for future researchers to investigate the role of independence values in other cultures.
9.9.1 Implications for Therapy

Values, as perceived needs, are motives that guide behaviour and interpretation of experience, and thus affect therapeutic outcome. The present study has found evidence that type of values may affect need satisfaction. In support of SDT research, values for equality and genuineness between self and others, and being socially involved, are linked to interpersonal need satisfaction and well-being. Values for independence are not strongly linked with dysfunction, unless social involvement is not valued. Self-enhancement values may indicate contingent, and thus fragile, self-esteem.

The notion of universal needs for well-being is somewhat controversial in clinical practice. Maintaining good rapport with clients and motivation for change requires that goals for therapy are worked out in collaboration with clients, while ethically therapists are constrained not to impose their own values on clients. Nevertheless, empirical research plays an important role in informing goals for therapy, such as challenging the negative cognitive biases associated with depression. Based on their understanding of what healthy functioning is, therapists guide clients towards valued outcomes, such as greater self-efficacy, self-sufficiency and self-esteem of the individual, and more satisfying relationships with others. Therefore, values of therapists concerning healthy functioning are likely to influence choice of intervention and outcome of therapy, and are worth examining in the light of research findings pertinent to needs for healthy functioning. In sum, results of the present study support previous findings that autonomy and relatedness are needs for well-being, and this has implications for explicit goals in therapy, including the nature of the therapeutic relationship itself. These might include
identifying dysfunctional self-enhancement values, encouraging salutogenic values, and working towards fulfilling unsatisfied salutogenic needs. More specifically, exploring the potential disadvantages of valuing independence at the expense of relatedness with others is indicated.

The present study used a systematic approach to exploring the relationship between what people want and gain from their experience, and their well-being. It is an approach that could also be adapted to general assessment of clients, indicating potential sources of stress or dissatisfaction, and would combine well with cognitive behavioural strategies such as motivational interviewing, goal setting, and assertiveness training. Figure 9. I shows a graphic example of a profile based on the INS measure developed in the present study. The marks in black indicate the reported values for each interpersonal need, given by a client on a scale of one to seven. Scores for need satisfaction are added in a contrasting colour.

![Graph](image-url)
Figure 9.1 Example of an INS Profile

Such a profile could quickly provide an estimate of client's values and perceived need satisfaction. The difference between value and satisfaction scores represents neediness. This example represents a client with high values for self-enhancement, and overall interpersonal neediness, particularly for belonging needs. This profile resembles the profile of participants in the present study with a diagnosis of social anxiety, and might indicate further exploration for social involvement and self-esteem issues, with a view to identifying dysfunctional self-enhancement values and increasing satisfaction of overall needs. Similar profiles could also be constructed from self-reported values of clients.

9.10 Conclusion

The aim of the current study was to explore relationships between interpersonal needs and well-being, taking into account the relationship of self-definition to interpersonal needs. There was evidence that values for autonomy and relatedness support the satisfaction of interpersonal needs, and that overall satisfied interpersonal needs are positively related to well-being and a predominantly autonomous self-concept. There was also evidence that both narcissistic and independence values are ego-defensive, either functioning as substitutes for unsatisfied salutogenic needs, or undermining their satisfaction. This includes a positive raw correlation between narcissistic and independence values, negative raw correlations between these values and
their corresponding need satisfaction, and positive raw correlations with psychological distress and alienation.

Study 2 found evidence that narcissistic needs, even when satisfied, may compromise satisfaction of other interpersonal needs, and may indicate fragile self-esteem. However, examination of the five groups provided little evidence that independence values compromise need satisfaction and well-being. Rather, the failure to value belonging needs indicated dysfunctional individualism. Finally, unsatisfied interpersonal needs were associated with psychological distress and low self-esteem.

Methodologically, the present research conceived of the study of well-being in terms of measuring discrepancies between values and need satisfaction, and building a profile of need dynamics. Results support the expectation that these profiles can reveal much about the link between perceived needs, neediness, and functioning. With further development, profiles of clients' values and needs could become a useful tool in assessment of clients' needs.

In sum, the present study has found support for the SDT position that, in a Western sample at least, autonomy and relatedness are both salutogenic needs. Furthermore, their satisfaction may be supported by comparatively greater valuing of these needs compared to self-enhancement needs. In support of previous sociological findings that individualists in an individualistic culture are prone to dysfunction (Scott, Ciarrochi & Deane, 2004), the Individualists in the current sample, characterised by low interpersonal values overall, reported compromised well being. In addition, narcissistic needs for self-enhancement, also reflecting individualistic values for maintaining high self-esteem, are likewise implicated in dysfunction.
REFERENCES


Frankl, V. Man's quest for meaning.


APPENDIX A

PARTICIPANTS INFORMATION SHEET
AND RESEARCH CONSENT FORM
My name is Emma Aiken and I am conducting a research project as part of my Psychology Doctorate program. This project explores peoples' interactions with others and how these are related to peoples' attitudes about themselves and about life. It is hoped that the results of this study may shed some light on people's needs in terms of happiness and positive functioning.

You will first be asked some general questions such as age, education and occupational status for the purpose of describing the sample, then a series of questions concerning your interactions with others, and your attitudes about yourself and life in general. The questions are presented mainly in multiple choice format. There is also a section in which you are asked to write briefly about two real-life experiences. Completion of the questionnaire should take about 45 minutes. Some questions are similar, but it is most helpful if all questions are answered. If you are uncertain how to answer, your first reaction is usually the best.

Your responses are completely anonymous. Do not record your name or any other person's name on the questionnaire. Results of this study may be published or provided to other researchers, however only group data will be presented and no individual will be identifiable. Your participation in this study is completely voluntary, and you are free to withdraw at any time.

By completing and returning this questionnaire, you are expressing your consent for your data to be used in the study. Retain this page for your information, and please check whether you have answered all items before returning your questionnaire. It is most helpful if all items are answered.

Sometimes, completing surveys of this nature can be distressing for some people. If you experience distress and would like to discuss this with someone, please contact:

Swinburne Psychology Centre; 9214 8653,
or Lifeline; 13 11 14.

Your responses are valuable, and your time is greatly appreciated!!!
Questions, complaints or concerns.

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.

If you have any questions regarding this study, please contact:

The Senior Investigator
Dr. Christine Critchley (03) 9214 5480
Psychology Department
School of Social and Behavioural Sciences

In the event that you have any complaint about the way this study has been conducted, or a query the Supervisor is unable to satisfy, please write to:

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 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
APPENDIX B

TEST BATTERY
General Information.

Please answer the following by circling the appropriate response, or by filling in the blank space.

1) Are you Male or Female

2) What is your age in years? 

3) What is your country of birth? 
   If outside Australia, how long have you lived in Australia? 

4) Do you consider yourself to belong to "Western" culture?
   Yes / No / Don't know

5) Please circle the number that best describes your intimate relationship status
   1. single - never been in long term relationship
   2. single - prior relationship/relationships
   3. currently in intimate relationship or married
   4. divorced/separated

6) Please circle the number that 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

7) Your current work status; more than one number may be circled
   1. Employed full time
   2. Employed part time
   3. Full time student
   4. Part time student
   5. Full time parent
6. Part time parent
7. Unemployed

Occupation (if employed)

8) How many "close" friends do you have? (people who know you well and who you are comfortable with). Count your partner and relatives if applicable.

1. No close friends
2. 1 or 2 close friends
3. 3 - 6 close friends
4. More than 6 close friends

9) Do you wish you had more friends? Yes / No

10) Approximately how much time do you spend socializing with your friends each week? (eg chatting, relaxing, playing sports together etc)

1. I - 2 hours per week or less
2. 3 - 6 hours per week
3. 7 - 12 hours per week
4. Over 12 hours per week

II) Is this enough socialising for you? Yes / No

12) Do you have a religion or hold other spiritual beliefs? Yes / No

If you belong to a religion or spiritual path, please name it;

13) Have you been given a diagnosis for any of the following conditions within the past two years:

1. Depression
2. Social Anxiety/Social Phobia
3. Other Anxiety Disorder
4. Other Psychological Disorder

14) Generally speaking, what is the most important thing in life for you? Please rank the following from 1 = most important to 3 = least important.
striving for individual achievement, success
helping others
freedom to follow my interests

Section 1: How do you see yourself? (About 10 to 15 minutes.)

Please read the pairs of statements (A and B), and think about which statement within the pair seems more true to you. Indicate which statement feels more true on the 5-point scale. For example, if statement A feels completely true and statement B feels completely untrue, the appropriate response would be 1. If the two statements are equally true, the appropriate response would be 3.

<table>
<thead>
<tr>
<th>Statement A</th>
<th>Statement B</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I always feel like I choose the things I do</td>
<td>Only A feels true</td>
</tr>
<tr>
<td>2. My emotions sometimes seem alien to me</td>
<td>Only A feels true</td>
</tr>
<tr>
<td>3. I choose what I have to do</td>
<td>Only A feels true</td>
</tr>
<tr>
<td>4. I feel like I’m rarely myself</td>
<td>Only A feels true</td>
</tr>
<tr>
<td>5. I do what I do because it interests me</td>
<td>Only A feels true</td>
</tr>
<tr>
<td>6. When I accomplish something, I often feel like it wasn’t really me who did</td>
<td>Only A feels true</td>
</tr>
</tbody>
</table>
7. I am free to do whatever I decide to do

<table>
<thead>
<tr>
<th>Only A</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Only B</th>
<th>What I do is often not what I choose to do</th>
</tr>
</thead>
<tbody>
<tr>
<td>feels true</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>feels true</td>
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</tr>
</tbody>
</table>

8. My body sometimes feels like a stranger to me

<table>
<thead>
<tr>
<th>Only A</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Only B</th>
<th>My body always feels like me</th>
</tr>
</thead>
<tbody>
<tr>
<td>feels true</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>feels true</td>
<td></td>
</tr>
</tbody>
</table>

9. I feel pretty free to do what is right for me

<table>
<thead>
<tr>
<th>Only A</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Only B</th>
<th>I feel pressure to do what others think is right</th>
</tr>
</thead>
<tbody>
<tr>
<td>feels true</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>feels true</td>
<td></td>
</tr>
</tbody>
</table>

10. Sometimes I look into the mirror and see a stranger, or someone who isn't the real me

<table>
<thead>
<tr>
<th>Only A</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Only B</th>
<th>When I look into the mirror, I see myself as I really am</th>
</tr>
</thead>
<tbody>
<tr>
<td>feels true</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>feels true</td>
<td></td>
</tr>
</tbody>
</table>

Please circle a number between 1 and 7 in the space provided next to each statement to indicate how strongly you disagree or agree with each of the following items.

1. My close relationships are an important reflection of who I am

<table>
<thead>
<tr>
<th>Only A</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

2. When I feel very close to someone, it often feels to me like that person is an important part of who I am

<table>
<thead>
<tr>
<th>Only A</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</table>

3. I usually feel a strong sense of pride when someone close to me has an important accomplishment

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<tr>
<th>Only A</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

4. I think one of the most important parts of who I am can be captured by looking at my close friends and understanding who they are

<table>
<thead>
<tr>
<th>Only A</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

5. When I think of myself, I often think of my close friends or family also

<table>
<thead>
<tr>
<th>Only A</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6. If a person hurts someone close to me I feel personally hurt as well

<table>
<thead>
<tr>
<th>Only A</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
7. In general, my close relationships are an important part of my self-image

8. Overall, my close relationships have very little to do with how I feel about myself

9. My close relationships are unimportant to my sense of what kind of person I am

10. My sense of pride comes from knowing who I have as close friends

II. When I establish a close friendship with someone, I usually develop a strong sense of identification with that person

Please circle any of the following self-descriptions that you believe apply to yourself. Put a line through those that do not apply to you.

<table>
<thead>
<tr>
<th>Adventurous</th>
<th>Irresponsible</th>
<th>Egotistical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggressive</td>
<td>Opinionated</td>
<td>Fault-finding</td>
</tr>
<tr>
<td>Competitive</td>
<td>Moderate</td>
<td>Cynical</td>
</tr>
<tr>
<td>Dependable</td>
<td>Obliging</td>
<td>Cooperative</td>
</tr>
<tr>
<td>Dissatisfied</td>
<td>Frank</td>
<td>Soft-hearted</td>
</tr>
<tr>
<td>Uninhibited</td>
<td>Hard-headed</td>
<td>Indifferent</td>
</tr>
<tr>
<td>Hostile</td>
<td>Dependent</td>
<td>Individualistic</td>
</tr>
<tr>
<td>Independent</td>
<td>Meek</td>
<td>Tactful</td>
</tr>
<tr>
<td>Outspoken</td>
<td>Autocratic</td>
<td>Timid</td>
</tr>
<tr>
<td>Rebellious</td>
<td>Confident</td>
<td>Suggestable</td>
</tr>
<tr>
<td>Unconventional</td>
<td>Strong-willed</td>
<td>Self-centered</td>
</tr>
<tr>
<td>Undependable</td>
<td>Arrogant</td>
<td>Aloof</td>
</tr>
<tr>
<td>--------------</td>
<td>------------</td>
<td>----------</td>
</tr>
<tr>
<td>Self-denying</td>
<td>Assertive</td>
<td>Argumentative</td>
</tr>
<tr>
<td>Spineless</td>
<td>Dominant</td>
<td>Ambitious</td>
</tr>
<tr>
<td>Self-confident</td>
<td>Passive</td>
<td>Cautious</td>
</tr>
<tr>
<td>Tactless</td>
<td>Tolerant</td>
<td>Conventional</td>
</tr>
</tbody>
</table>

Please circle a number 0, 1, 2 or 3, for each statement below.

0 Indicates that this statement does not apply to me at all
1 This statement applies to me to some degree, or some of the time
2 This applies to me to a considerable degree, or half of the time
3 This applies to me very much, or most of the time

<table>
<thead>
<tr>
<th>Statement</th>
<th>Not at all</th>
<th>Very much</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 I am aware of dryness of my mouth</td>
<td>0 1 2 3</td>
<td></td>
</tr>
<tr>
<td>2 I don’t seem to experience any positive feeling at all</td>
<td>0 1 2 3</td>
<td></td>
</tr>
<tr>
<td>3 I experience breathing difficulty (eg, excessively rapid breathing,</td>
<td>0 1 2 3</td>
<td></td>
</tr>
<tr>
<td>breathlessness in the absence of physical exertion)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 I over-react to situations</td>
<td>0 1 2 3</td>
<td></td>
</tr>
<tr>
<td>5 I find it difficult to relax</td>
<td>0 1 2 3</td>
<td></td>
</tr>
<tr>
<td>6 I feel that I have nothing to look forward to</td>
<td>0 1 2 3</td>
<td></td>
</tr>
<tr>
<td>7 I feel like I am using a lot of nervous energy</td>
<td>0 1 2 3</td>
<td></td>
</tr>
<tr>
<td>8 I feel like I am not worth much as a person</td>
<td>0 1 2 3</td>
<td></td>
</tr>
<tr>
<td>9 I feel like I am rather touchy</td>
<td>0 1 2 3</td>
<td></td>
</tr>
<tr>
<td>10 I feel scared without any good reason</td>
<td>0 1 2 3</td>
<td></td>
</tr>
<tr>
<td>11 I find it hard to wind down</td>
<td>0 1 2 3</td>
<td></td>
</tr>
<tr>
<td>12 I am aware of the action of my heart in the absence of any physical</td>
<td>0 1 2 3</td>
<td></td>
</tr>
<tr>
<td>exertion (eg, sense of heart rate increase, heat missing a beat)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
13 I feel down-hearted and blue 0 1 2 3
14 I feel close to panic 0 1 2 3
15 I am unable to get enthusiastic about anything 0 1 2 3
16 I am intolerant of anything that keeps me from getting on
   with what I am trying to do 0 1 2 3
17 I feel that life is meaningless 0 1 2 3
18 I feel like I am getting agitated 0 1 2 3
19 I feel worried about situations in which I might panic and
   make a fool of myself 0 1 2 3
20 I experience trembling (eg, in the hands) 0 1 2 3
21 I find it difficult to work up the initiative to do things 0 1 2 3

Please circle a number between 1 and 5 in the space provided next to each statement to indicate how strongly you disagree or agree.

1. I would prefer to be a leader 1 2 3 4 5 Strongly
   disagree Strongly agree
2. I see myself as a good leader 1 2 3 4 5 Strongly
   disagree Strongly agree
3. I will be a success 1 2 3 4 5 Strongly
   disagree Strongly agree
4. People always seem to recognize my authority 1 2 3 4 5 Strongly
   disagree Strongly agree
5. I have a natural talent for influencing people 1 2 3 4 5 Strongly
   disagree Strongly agree
6. I am assertive 1 2 3 4 5 Strongly
   disagree Strongly agree
7. I like to have authority over other people 1 2 3 4 5 Strongly
   disagree Strongly agree
<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>8. I am a born leader</td>
<td>Strongly disagree</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>9. I rarely depend on anyone else to get anything done</td>
<td>Strongly disagree</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>10. I like to take responsibility for making decisions</td>
<td>Strongly disagree</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>II. I am more capable than other people</td>
<td>Strongly disagree</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>12. I can live my life in any way I want to</td>
<td>Strongly disagree</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>13. I always know what I am doing</td>
<td>Strongly disagree</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>14. I am going to be a great person</td>
<td>Strongly disagree</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>15. I am an extraordinary person</td>
<td>Strongly disagree</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>16. I know that I am good because everyone keeps telling me so</td>
<td>Strongly disagree</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>17. I like to be complimented</td>
<td>Strongly disagree</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>18. I think I am a special person</td>
<td>Strongly disagree</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>19. I wish somebody someday would write my autobiography</td>
<td>Strongly disagree</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>20. I am apt to show off if! get the chance</td>
<td>Strongly disagree</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>21. Modesty doesn’t become me</td>
<td>Strongly disagree</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>22. I get upset when people don't notice how I look when I go out in public</td>
<td>Strongly disagree</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>Strongly agree</td>
</tr>
</tbody>
</table>
23. I like to be the center of attention  Strongly disagree 1 2 3 4 5  Strongly agree
24. I would do almost anything on a dare  Strongly disagree 1 2 3 4 5  Strongly agree
25. I like to start new fads and fashions  Strongly disagree 1 2 3 4 5  Strongly agree
26. I can read people like a book  Strongly disagree 1 2 3 4 5  Strongly agree
27. I can make anybody believe anything I want them to  Strongly disagree 1 2 3 4 5  Strongly agree
28. I find it easy to manipulate people  Strongly disagree 1 2 3 4 5  Strongly agree
29. I can usually talk my way out of anything  Strongly disagree 1 2 3 4 5  Strongly agree
30. Everybody likes to hear my stories  Strongly disagree 1 2 3 4 5  Strongly agree
31. I will never be satisfied until I get all that I deserve  Strongly disagree 1 2 3 4 5  Strongly agree
32. I expect to get a great deal from other people  Strongly disagree 1 2 3 4 5  Strongly agree
33. I want to amount to something in the eyes of the world  Strongly disagree 1 2 3 4 5  Strongly agree
34. I have a strong will to power  Strongly disagree 1 2 3 4 5  Strongly agree
35. I insist on getting the respect that is due to me  Strongly disagree 1 2 3 4 5  Strongly agree
36. If! rul ed the world it would be a much better place  Strongly disagree 1 2 3 4 5  Strongly agree

Please rate yourself on these items by circling the appropriate number

1. I feel that I am a person of worth, at least on an equal basis with others
1. STRONGLY AGREE 2. AGREE 3. DISAGREE 4. STRONGLY DISAGREE

2. I have a number of good qualities
1. STRONGLY AGREE 2. AGREE 3. DISAGREE 4. STRONGLY DISAGREE

3. All in all, I am inclined to feel that I am a failure
1. STRONGLY AGREE 2. AGREE 3. DISAGREE 4. STRONGLY DISAGREE

4. I am able to do most things as well as most other people
1. STRONGLY AGREE 2. AGREE 3. DISAGREE 4. STRONGLY DISAGREE

5. I feel I do not have much to be proud of
1. STRONGLY AGREE 2. AGREE 3. DISAGREE 4. STRONGLY DISAGREE

6. I take a positive attitude toward myself
1. STRONGLY AGREE 2. AGREE 3. DISAGREE 4. STRONGLY DISAGREE

7. On the whole, I am satisfied with myself
1. STRONGLY AGREE 2. AGREE 3. DISAGREE 4. STRONGLY DISAGREE

8. I wish I had more respect for myself
1. STRONGLY AGREE 2. AGREE 3. DISAGREE 4. STRONGLY DISAGREE

9. I certainly feel useless at times
1. STRONGLY AGREE 2. AGREE 3. DISAGREE 4. STRONGLY DISAGREE
10. At times I think I am no good at all

1. STRONGLY 2. AGREE 3. DISAGREE 4. STRONGLY
AGREE DISAGREE

Section 2: Attitudes to life. *(About 10 minutes.)*

Please indicate your response to each of the following statements by circling a number from 0 to 10. 0 indicates that the statement is completely false for you; 10 indicates that it is completely true for you.

<table>
<thead>
<tr>
<th>Statement</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Those who work for a living are manipulated by the bosses</td>
<td></td>
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<td>2. I wonder why I work at all</td>
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<tr>
<td>3. Most of life is wasted in meaningless activity</td>
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<tr>
<td>4. If you have to work, you might as well choose a career where you deal</td>
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<td>with matters of life and death</td>
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<tr>
<td>5. No matter how hard you work, you never really seem to reach your goals</td>
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<tr>
<td>6. I find it difficult to imagine enthusiasm concerning work</td>
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<tr>
<td>7. It doesn’t matter if people work hard at their jobs; only a few bosses profit</td>
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<tr>
<td>8. Ordinary work is too boring to be worth doing</td>
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<tr>
<td>9. I feel no need to try my best at work for it makes no difference anyway</td>
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<tr>
<td>10. I don’t like my job or enjoy my work: I just put in my time to get paid</td>
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<tr>
<td>11. I find it hard to believe people who actually feel that the work they perform</td>
<td></td>
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</tbody>
</table>
is of value to society

<table>
<thead>
<tr>
<th>Question</th>
<th>Score</th>
<th>True/False</th>
</tr>
</thead>
<tbody>
<tr>
<td>If a job is dangerous, that makes it all the better</td>
<td>10</td>
<td>True</td>
</tr>
<tr>
<td>Thinking of yourself as a free person leads to great frustration and difficulty</td>
<td>10</td>
<td>True</td>
</tr>
<tr>
<td>The human’s fabled ability to think is not really such an advantage</td>
<td>10</td>
<td>True</td>
</tr>
<tr>
<td>The attempt to know yourself is a waste of effort</td>
<td>10</td>
<td>True</td>
</tr>
<tr>
<td>I am really interested in the possibility of expanding my consciousness through drugs</td>
<td>10</td>
<td>True</td>
</tr>
<tr>
<td>No matter how hard I try, my efforts will accomplish nothing</td>
<td>10</td>
<td>True</td>
</tr>
<tr>
<td>Life is empty and has no meaning form for me</td>
<td>10</td>
<td>True</td>
</tr>
<tr>
<td>The belief in individuality is only justifiable to impress others</td>
<td>10</td>
<td>True</td>
</tr>
<tr>
<td>I wish I could be carried away by a revelation, as apparently happened to some historically important persons</td>
<td>10</td>
<td>True</td>
</tr>
<tr>
<td>Often I do not really know my own mind</td>
<td>10</td>
<td>True</td>
</tr>
<tr>
<td>I long for a simple life, where body needs are the most important things and decisions don’t have to be made</td>
<td>10</td>
<td>True</td>
</tr>
<tr>
<td>Unfortunately, people don’t seem to know that they are just creatures after all</td>
<td>10</td>
<td>True</td>
</tr>
<tr>
<td>The most exciting thing for me is my own fantasies</td>
<td>10</td>
<td>True</td>
</tr>
<tr>
<td>Item</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Politicians control our lives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Our laws are so unfair I want nothing to do with them</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The only reason to involve yourself in society is to gain power</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I would drop almost anything to join some big cause</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Most of my activities are determined by what society demands</td>
<td></td>
<td></td>
</tr>
<tr>
<td>In order to avoid being hassled by society, I feel I must go my own way and not get involved</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No matter how sincerely you work for social change, society never really seems to improve</td>
<td></td>
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</tr>
<tr>
<td>My most meaningful experiences have come through participation in social movements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>There are only strict paths to follow if one is to be successful in our society</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Our society holds no worthwhile values or goals</td>
<td></td>
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</tr>
<tr>
<td>Why should I bother to vote; none of the candidates will be able to change things for the better</td>
<td></td>
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</tr>
<tr>
<td>I admire those who participate in protest movements that are full of danger and drama</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Everyone is out to manipulate you to his/her own ends</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
38. I am better off when I keep to myself
0 1 2 3 4 5 6 7 8 9 false 
10 true

39. Most people are happy not to know that what they call love is really self-interest
0 1 2 3 4 5 6 7 8 9 false 
10 true

40. Big parties are very exciting to me
0 1 2 3 4 5 6 7 8 9 false 
10 true

41. Often when I interact with others, I feel insecure over the outcome
0 1 2 3 4 5 6 7 8 9 false 
10 true

42. There is no point in socializing - it goes nowhere and is nothing
0 1 2 3 4 5 6 7 8 9 false 
10 true

43. Why bother to try to love or care for people; they'll only hurt you in the end
0 1 2 3 4 5 6 7 8 9 false 
10 true

44. What really turns me on about socializing is the challenge of a group of people disagreeing and arguing
0 1 2 3 4 5 6 7 8 9 false 
10 true

45. I try to avoid close relationships with people so that I will not be obligated to them
0 1 2 3 4 5 6 7 8 9 false 
10 true

46. Most social relationships are meaningless
0 1 2 3 4 5 6 7 8 9 false 
10 true

47. People who believe that "love makes the world go round" are fooling themselves
0 1 2 3 4 5 6 7 8 9 false 
10 true

48. The best reason for getting involved with other people is participating in some action that will catch everyone up
0 1 2 3 4 5 6 7 8 9 false 
10 true

49. When you marry and have children you have lost your freedom of choice
0 1 2 3 4 5 6 7 8 9 false 
10 true

50. I would just as soon avoid any contact with my family except an occasional email or phone call
0 1 2 3 4 5 6 7 8 9 false 
10 true
<table>
<thead>
<tr>
<th></th>
<th></th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
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<th>7</th>
<th>8</th>
<th>9</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>51. A family is an invention for limiting individual freedom of action</td>
<td></td>
<td></td>
<td>false</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>52. It would be really exciting to have another, secret life to supplement your family life</td>
<td></td>
<td></td>
<td>false</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>53. My parents imposed their wishes and standards on me too much</td>
<td></td>
<td></td>
<td>false</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>54. Parents work hard for their children only to be disappointed and rejected</td>
<td></td>
<td></td>
<td>false</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>55. The only reason to marry is for convenience and security</td>
<td></td>
<td></td>
<td>false</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>56. Strange as it seems, it is at times of family crisis that I feel most alive</td>
<td></td>
<td></td>
<td>false</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>57. I am not sure I want to be married because I don't want to feel tied down</td>
<td></td>
<td></td>
<td>false</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>58. For me, home and family have never had much positive meaning</td>
<td></td>
<td></td>
<td>false</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>59. Families do not provide security and warmth; they just restrict you and give you many unnecessary responsibilities</td>
<td></td>
<td></td>
<td>false</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>60. What I really like about family life is the huge, action-filled reunions at holiday times</td>
<td></td>
<td></td>
<td>false</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>6</td>
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</tr>
</tbody>
</table>

**Section 3: Interactions with others. (About 10 minutes.)**

The following items are about what you find most important, enjoyable or satisfying in your interactions with other people in general. Please circle a number from 1 to 7 in the space provided to indicate how important each of these aspects of your interactions with others is for you.

1. Showing others what I am best at doing  Not very important 1 2 3 4 5 6 7 Very important
<table>
<thead>
<tr>
<th>2. Having others recognise that I am at least as good as they are</th>
<th>Not very important</th>
<th>1 2 3 4 5 6 7</th>
<th>Very important</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. An equal give-and-take between other people and myself</td>
<td>Not very important</td>
<td>1 2 3 4 5 6 7</td>
<td>Very important</td>
</tr>
<tr>
<td>4. Being around people I find personally interesting</td>
<td>Not very important</td>
<td>1 2 3 4 5 6 7</td>
<td>Very important</td>
</tr>
<tr>
<td>5. Being able to do things my own way without hassles from others</td>
<td>Not very important</td>
<td>1 2 3 4 5 6 7</td>
<td>Very important</td>
</tr>
<tr>
<td>6. Being given the credit that is due to me by others</td>
<td>Not very important</td>
<td>1 2 3 4 5 6 7</td>
<td>Very important</td>
</tr>
<tr>
<td>7. Making sure others do the right thing by me</td>
<td>Not very important</td>
<td>1 2 3 4 5 6 7</td>
<td>Very important</td>
</tr>
<tr>
<td>8. An understanding and respect for each other's perspective</td>
<td>Not very important</td>
<td>1 2 3 4 5 6 7</td>
<td>Very important</td>
</tr>
<tr>
<td>9. Acting according to my innermost values and beliefs around others</td>
<td>Not very important</td>
<td>1 2 3 4 5 6 7</td>
<td>Very important</td>
</tr>
<tr>
<td>10. Not having limits or restrictions set on me by others</td>
<td>Not very important</td>
<td>1 2 3 4 5 6 7</td>
<td>Very important</td>
</tr>
<tr>
<td>11. Others showing appreciation of my good points or efforts</td>
<td>Not very important</td>
<td>1 2 3 4 5 6 7</td>
<td>Very important</td>
</tr>
<tr>
<td>12. Being able to prove my point or get others to respect my opinion</td>
<td>Not very important</td>
<td>1 2 3 4 5 6 7</td>
<td>Very important</td>
</tr>
<tr>
<td>13. Joining in; doing something that everyone wants to do together</td>
<td>Not very important</td>
<td>1 2 3 4 5 6 7</td>
<td>Very important</td>
</tr>
<tr>
<td>14. The chance to do things I truly enjoy with others</td>
<td>Not very important</td>
<td>1 2 3 4 5 6 7</td>
<td>Very important</td>
</tr>
<tr>
<td>15. Being myself, no matter what others think</td>
<td>Not very important</td>
<td>1 2 3 4 5 6 7</td>
<td>Very important</td>
</tr>
</tbody>
</table>
16. Others letting me know that I am attractive, interesting or important to them
Not very important 1 2 3 4 5 6 7 Very important

17. Not being controlled or manipulated by others
Not very important 1 2 3 4 5 6 7 Very important

18. Having the chance to really get to know each other
Not very important 1 2 3 4 5 6 7 Very important

19. Being able to express myself freely; being my true self around others
Not very important 1 2 3 4 5 6 7 Very important

20. Having other people respect my way of doing things, even if they don't agree
Not very important 1 2 3 4 5 6 7 Very important

21. Having others ask me for my advice or opinion
Not very important 1 2 3 4 5 6 7 Very important

22. Not being put down, pushed around, or made to feel insecure
Not very important 1 2 3 4 5 6 7 Very important

23. Helping each other out and sharing our ups and downs
Not very important 1 2 3 4 5 6 7 Very important

24. Sharing my personal experience or perspective with others
Not very important 1 2 3 4 5 6 7 Very important

25. Being a unique person; not just another member of "the pack"
Not very important 1 2 3 4 5 6 7 Very important

The next set of items are very similar to the 25 statements that you have just answered; however, this time instead of indicating how important each aspect of your interactions with others is for you, please rate how satisfied or content you are with each of these aspects.

For example, let's say that others do not often give you the credit that is due to you. If that bothered you, you should rate yourself as not content
with this aspect of your interactions. Or, if that did not bother you, you should rate yourself as content with this aspect of your interactions.

Please circle a number from 1 to 7 in the space provided, from 1 = not at all content, to 7 = very content

<table>
<thead>
<tr>
<th>1. Opportunities to show others what I am best at doing</th>
<th>Not at all content</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>Very content</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Recognition from others that I am at least as good as they are</td>
<td>Not at all content</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>Very content</td>
</tr>
<tr>
<td>3. Equal give-and-take between other people and myself</td>
<td>Not at all content</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>Very content</td>
</tr>
<tr>
<td>4. Opportunities to be around people I find personally interesting</td>
<td>Not at all content</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>Very content</td>
</tr>
<tr>
<td>5. Being able to do things my own way without hassles from others</td>
<td>Not at all content</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>Very content</td>
</tr>
<tr>
<td>6. Being given the credit that is due to me by others</td>
<td>Not at all content</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>Very content</td>
</tr>
<tr>
<td>7. Feeling others are doing the right thing by me</td>
<td>Not at all content</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>Very content</td>
</tr>
<tr>
<td>8. Feeling that there is an understanding and respect for each other’s perspective</td>
<td>Not at all content</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>Very content</td>
</tr>
<tr>
<td>9. Being able to act according to my innermost values and beliefs around others</td>
<td>Not at all content</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>Very content</td>
</tr>
<tr>
<td>10. Not having others setting limits or restrictions on what I do</td>
<td>Not at all content</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>Very content</td>
</tr>
<tr>
<td>11. Being appreciated for my good points or efforts</td>
<td>Not at all content</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>Very content</td>
</tr>
<tr>
<td>12. Opportunities to prove my point or have others respect my opinion</td>
<td>Not at all content</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>Very content</td>
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<td></td>
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</tr>
<tr>
<td>13. Opportunities to join in and do things that everyone wants to do together</td>
<td>Not at all content, 1, 2, 3, 4, 5, 6, 7 Very content</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>14. Opportunities to do things I truly enjoy with others</td>
<td>Not at all content, 1, 2, 3, 4, 5, 6, 7 Very content</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>15. Being able to be myself, no matter what others think</td>
<td>Not at all content, 1, 2, 3, 4, 5, 6, 7 Very content</td>
<td></td>
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<td>16. Others letting me know that I am attractive, interesting or important to them</td>
<td>Not at all content, 1, 2, 3, 4, 5, 6, 7 Very content</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>17. Not being controlled or manipulated by others</td>
<td>Not at all content, 1, 2, 3, 4, 5, 6, 7 Very content</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. Opportunities to really get to know each other</td>
<td>Not at all content, 1, 2, 3, 4, 5, 6, 7 Very content</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>19. Being able to express myself freely; being my true self around others</td>
<td>Not at all content, 1, 2, 3, 4, 5, 6, 7 Very content</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>20. Feeling that other people respect my way of doing things, even if they don’t agree</td>
<td>Not at all content, 1, 2, 3, 4, 5, 6, 7 Very content</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. Others coming to me to ask me for my advice or opinion</td>
<td>Not at all content, 1, 2, 3, 4, 5, 6, 7 Very content</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22. Others not putting me down, pushing me around, or making me feel insecure</td>
<td>Not at all content, 1, 2, 3, 4, 5, 6, 7 Very content</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23. Opportunities to help each other out and sharing our ups and downs</td>
<td>Not at all content, 1, 2, 3, 4, 5, 6, 7 Very content</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24. Opportunities to share my personal experience or perspective with others</td>
<td>Not at all content, 1, 2, 3, 4, 5, 6, 7 Very content</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>25. Being able to be a unique person; not just another member of &quot;the pack&quot;</td>
<td>Not at all content, 1, 2, 3, 4, 5, 6, 7 Very content</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
APPENDIXC

ANOVA WITHIN-GROUP
AND
MANOVA BETWEEN-GROUPS
COMPARISON STATISTICS
(FOR STUDY 2)
Table C1
Analyses of Variance Statistics for INS Value/Value and Value/Satisfaction Comparisons for the "Self-Other Balanced" Group

<table>
<thead>
<tr>
<th>INS Comparisons</th>
<th>F(1,41)</th>
<th>P</th>
<th>η²</th>
<th>Observed power</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Value/Value</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AY' vs BY</td>
<td>7.7</td>
<td>&lt;.05</td>
<td>.16</td>
<td>.77</td>
</tr>
<tr>
<td>AY'' vs NY</td>
<td>472.85</td>
<td>&lt;.001</td>
<td>.92</td>
<td>1</td>
</tr>
<tr>
<td>BY' vs IY</td>
<td>5.92</td>
<td>&lt;.05</td>
<td>.02</td>
<td>.60</td>
</tr>
<tr>
<td>BY'' vs NY</td>
<td>195.94</td>
<td>&lt;.001</td>
<td>.83</td>
<td>1</td>
</tr>
<tr>
<td><strong>Value/Satisfaction</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AY' vs AS</td>
<td>.50</td>
<td>ns</td>
<td>.01</td>
<td>.11</td>
</tr>
<tr>
<td>BY' vs BS</td>
<td>1.75</td>
<td>ns</td>
<td>.04</td>
<td>.25</td>
</tr>
<tr>
<td>IY vs IS'</td>
<td>6.81</td>
<td>&lt;.05</td>
<td>.14</td>
<td>.72</td>
</tr>
<tr>
<td>NY vs NS''</td>
<td>89.6</td>
<td>&lt;.001</td>
<td>.69</td>
<td>1</td>
</tr>
</tbody>
</table>

*Note*

N = 42

*indicated mean is significantly greater than comparison mean at the .05 level*

**indicated mean is significantly greater than comparison mean at the .01 level!*

*Table C1: Analyses of Variance Statistics for INS Value/Value and Value/Satisfaction Comparisons for the "Self-Other Balanced" Group*
### Table C2

**Analyses of Variance Statistics for INS Value/Value and Value/Satisfaction Comparisons for the Slightly Lonely Group.**

<table>
<thead>
<tr>
<th>INS Comparisons</th>
<th>$F(1,52)$</th>
<th>$P$</th>
<th>$\eta^2$</th>
<th>Observed power</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Value/Value</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AV vs BV</td>
<td>2.33</td>
<td>ns</td>
<td>.04</td>
<td>.32</td>
</tr>
<tr>
<td>AV&quot; vs IV</td>
<td>22.72</td>
<td>&lt;.001</td>
<td>.30</td>
<td>I</td>
</tr>
<tr>
<td>AV&quot; vs NV</td>
<td>62.10</td>
<td>&lt;.001</td>
<td>.54</td>
<td>I</td>
</tr>
<tr>
<td>BV&quot; vs IV</td>
<td>7.10</td>
<td>&lt;.01</td>
<td>.12</td>
<td>.74</td>
</tr>
<tr>
<td>BV&quot; vs NV</td>
<td>61.54</td>
<td>&lt;.001</td>
<td>.54</td>
<td>I</td>
</tr>
<tr>
<td>IV&quot; vs NV</td>
<td>33.57</td>
<td>&lt;.001</td>
<td>.32</td>
<td>I</td>
</tr>
<tr>
<td><strong>Value/Satisfaction</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AV&quot; vs AS</td>
<td>105.67</td>
<td>&lt;.001</td>
<td>.67</td>
<td>1</td>
</tr>
<tr>
<td>AV&quot; vs BS</td>
<td>81.37</td>
<td>&lt;.001</td>
<td>.61</td>
<td>1</td>
</tr>
<tr>
<td>IV&quot; vs IS</td>
<td>61.22</td>
<td>&lt;.001</td>
<td>.67</td>
<td>1</td>
</tr>
<tr>
<td>NV vs NS</td>
<td>6.23</td>
<td>&lt;.05</td>
<td>.12</td>
<td>.69</td>
</tr>
</tbody>
</table>

*Note*

$N=54$

* indicated mean is significantly greater than comparison mean at the .05 level

** indicated mean is significantly greater than comparison mean at the .01 level

### Table C3

**Analyses of Variance Statistics/or INS Value/Value and Value/Need Satisfaction Comparisons For Satisfied Narcissists.**

<table>
<thead>
<tr>
<th>INS Comparisons</th>
<th>$F(1,44)$</th>
<th>$P$</th>
<th>Observed power</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Value/Value</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BV vs NV</td>
<td>36.65</td>
<td>&lt;.001</td>
<td>.45</td>
</tr>
<tr>
<td>AV vs NV</td>
<td>34.50</td>
<td>&lt;.001</td>
<td>.44</td>
</tr>
<tr>
<td><strong>Value/Satisfaction</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AV vs AS</td>
<td>8.41</td>
<td>&lt;.1</td>
<td>.16</td>
</tr>
<tr>
<td>BV vs BS</td>
<td>8.62</td>
<td>&lt;.1</td>
<td>.16</td>
</tr>
<tr>
<td>IV vs IS</td>
<td>11.51</td>
<td>&lt;.1</td>
<td>.20</td>
</tr>
<tr>
<td>NV vs NS</td>
<td>2.81</td>
<td>ns</td>
<td>.06</td>
</tr>
</tbody>
</table>

*Note*

$N=45$

* indicated mean is significantly greater than comparison mean at the .05 level

** indicated mean is significantly greater than comparison mean at the .01 level
Table C4

Analyses of Variance Statistics for INS Value and Value/Satisfaction Comparisons For Needy Narcissists.

<table>
<thead>
<tr>
<th>INS Comparisons</th>
<th>$F(1, 80)$</th>
<th>$p$</th>
<th>Observed power</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Vain e Value</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AV'' vs NV</td>
<td>42.08</td>
<td>&lt;.001</td>
<td>.54</td>
</tr>
<tr>
<td>AV vs IV''</td>
<td>12.64</td>
<td>&lt;.001</td>
<td>.14</td>
</tr>
<tr>
<td>BV vs NV</td>
<td>1.89</td>
<td>ns</td>
<td>.02</td>
</tr>
<tr>
<td>BV vs IV''</td>
<td>59.54</td>
<td>&lt;.001</td>
<td>.43</td>
</tr>
<tr>
<td><strong>Value/Satisfac tion</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AV'' vs AS</td>
<td>864.72</td>
<td>&lt;.001</td>
<td>.92</td>
</tr>
<tr>
<td>BV'' vs BS</td>
<td>357.92</td>
<td>&lt;.001</td>
<td>.82</td>
</tr>
<tr>
<td>IV'' vs IS</td>
<td>737.16</td>
<td>&lt;.001</td>
<td>.90</td>
</tr>
<tr>
<td>NV'' vs NS</td>
<td>294.29</td>
<td>&lt;.001</td>
<td>.79</td>
</tr>
</tbody>
</table>

*indicated mean is significantly greater than comparison mean at the .05 level
**indicated mean is significantly greater than comparison mean at the .01 level

Note
$N = 81$
Table C5
Analyses of Variance Statistics for INS Value/Nalue and Value/Satisfaction Comparisons For "Individualists".

<table>
<thead>
<tr>
<th>INS Comparisons</th>
<th>$F(1,26)$</th>
<th>$p$</th>
<th>Observed power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value/Nalue</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AV vs IV'</td>
<td>4.52</td>
<td>&lt;.05</td>
<td>.15</td>
</tr>
<tr>
<td>BV vs IV''</td>
<td>71.06</td>
<td>&lt;.001</td>
<td>.73</td>
</tr>
<tr>
<td>Value/Satisfaction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AV'' vs AS</td>
<td>33.06</td>
<td>&lt;.001</td>
<td>.56</td>
</tr>
<tr>
<td>BV vs BS'</td>
<td>0.08</td>
<td>ns</td>
<td>.00</td>
</tr>
<tr>
<td>IV'' vs IS</td>
<td>47.32</td>
<td>&lt;.001</td>
<td>.65</td>
</tr>
<tr>
<td>NY vs NS'</td>
<td>0.95</td>
<td>ns</td>
<td>.04</td>
</tr>
</tbody>
</table>

**Note**

* indicates mean is significantly greater than comparison mean at the .05 level
** indicates mean is significantly greater than comparison mean at the .01 level

$N = 27$
Table C6
MANOVA Between-groups Mean Score Comparisons for INS Value Subscales

<table>
<thead>
<tr>
<th>INS Subscale</th>
<th>Group M(SD)</th>
<th>Comp. M(SD)</th>
<th>Mean Difference</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Group - Comp. M(SD) (Std. Error)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Authenticity (AV)</td>
<td>1.609 (.66)</td>
<td>2.580 (.69)</td>
<td>.29 (.14)</td>
<td>ns</td>
</tr>
<tr>
<td></td>
<td>3.613 (.66)</td>
<td>- .04 (.12)</td>
<td>ns</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.604 (.52)</td>
<td>- .32 (.13)</td>
<td>ns</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5.452 (.94)</td>
<td>1.57 (.21)*</td>
<td>&lt;.001</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.580 (.69)</td>
<td>3.613 (.66)</td>
<td>- .33 (.12)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td></td>
<td>4.604 (.52)</td>
<td>- .60 (.12)*</td>
<td>&lt;.001</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5.452 (.94)</td>
<td>1.26 (.20)*</td>
<td>&lt;.001</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.613 (.66)</td>
<td>4.640 (.52)</td>
<td>- .27 (.11)</td>
<td>ns</td>
</tr>
<tr>
<td></td>
<td>5.452 (.94)</td>
<td>1.61 (.19)*</td>
<td>&lt;.001</td>
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Note:
- * indicates mean is significantly greater than comparison mean at the .05 level
- ** indicates mean is significantly greater than comparison mean at the .001 level

Group 1 = Satisfied Narcissists, Group 2 = Slightly Lonely, Group 3 = Needy Narcissists,
Group 4 = Self-other Balanced, Group 5 = Individualists
Comp. Group = Comparison Group

N = 248
### Table C7
**Between-groups Comparisons for Mean INS Discrepancy Scores**

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Note:

- * indicated mean is significantly greater than comparison mean at the .05 level
- ** indicated mean is significantly greater than comparison mean at the .01 level

Group 1 = Satisfied Narcissists, Group 2 = Slightly Lonely, Group 3 = Needy Narcissists,
Group 4 = Self-other Balanced, Group 5 = Individualists

Comp. = Comparison Group

\[ N = 248 \]
### Table C8
MANOVA Between-groups Mean Score Comparisons for Self-Concept Measures

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**Note:**

N = 248

*indicated mean is significantly greater than comparison mean at the .05 level

**indicated mean is significantly greater than comparison mean at the .001 level

*Group 1 = Satisfied Narcissists, Group 2 = Slightly Lonely, Group 3 = Needy Narcissists,
Group 4 = Self-other Balanced, Group 5 = Individualists

Comp = Comparison Group
Table C9
MANOVA Between-groups Comparisons/or Mean NPI Subscale Scores

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<th>NPI Subscale</th>
<th>Group M(SD)</th>
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<th>Mean Difference</th>
<th>Group - Comp. (Std. Error)</th>
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<td>4.2312(5.89)</td>
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Note:
N = 248
* indicates mean is significantly greater than comparison mean at the .05 level
** indicates mean is significantly greater than comparison mean at the .01 level
Group 1 = Satisfied Narcissists, Group 2 = Slightly Lonely, Group 3 = Needy Narcissists,
Group 4 = Self-other Balanced, Group 5 = Individualists Comp. = Comparison Group
## Table C10

**MANOVA Between-groups Mean Score Comparisons for Alienation Subscales**

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<th>Comp. M(SD)</th>
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<td>2. 37A9 (20.66)</td>
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<td>4. 29.12 (13.45)</td>
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<td>Alienation From Others</td>
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<td>2. 43.87 (19.91)</td>
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<td>3. 59.71 (15.25)</td>
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*indicated mean is significantly greater than comparison mean at the .05 level

**indicated mean is significantly greater than comparison mean at the .01 level

*Group 1 = Satisfied Narcissists, Group 2 = Slightly Lonely, Group 3 = Need Narcissists,
Group 4 = Self-other Balanced, Group 5 = Individualists

Compo = Comparison Group

Note:

N = 248
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<td>&lt;.001</td>
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<td><strong>DAS Stress</strong></td>
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<td>1. 8.42 (4.87)</td>
<td>2. 11.00(4.33)</td>
<td>-2.58 (.94)</td>
<td>os</td>
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<tr>
<td>3. 14.46 (4.46)</td>
<td>-6.03 (.88)**</td>
<td>&lt;.001</td>
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<tr>
<td>4. 6.26 (4.13)</td>
<td>2.16 (.97)</td>
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<td>5. 11.78 (3.86)</td>
<td>-3.56 (1.04)*</td>
<td>&lt;.05</td>
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<td>2. 11.00 (4.33)</td>
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<tr>
<td>3. 14.46 (4.46)</td>
<td>-3.46 (.77)**</td>
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<td>4. 6.26 (4.13)</td>
<td>4.74 (.87)**</td>
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<td>-7.8 (.95)</td>
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<td>2.68 (.89)*</td>
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<td>2.25.13 (6.82)</td>
<td>5.07(1.27)*</td>
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<tr>
<td>3. 21.64 (6.50)</td>
<td>8.56 (1.12)**</td>
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<td>-2.39 (1.38)</td>
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<tr>
<td>5. 23.04 (6.47)</td>
<td>7.16 (1.51)**</td>
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<td>3. 21.64 (6.50)</td>
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<td>3.21.64 (6.50)</td>
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<td>4. 32.60 (7.03)</td>
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</table>

Note:

- *indicated mean is significantly greater than comparison mean at the .05 level
- **indicated mean is significantly greater than comparison mean at the .01 level

Group 1 = Satisfied Narcissists, Group 2 = Slightly Lonely, Group 3 = Needy Narcissists, Group 4 = Self-other Balanced, Group 5 = Individualists Comp. = Comparison Group
APPENDIX D

CLUSTER ANALYSIS DENDROGRAM

USING

WARD METHOD/SQUARED EUCLIDEAN DISTANCE
$N = 45$ (Satisfied Narcissists)

$N = 27$ (Individualists)

$N = 81$ (Needy Narcissists)

(Needy Narcissists cont.)

$N = 45$ (Satisfied Narcissists)

$N = 42$ (Self-other Balanced)