Understanding Family Violence Use by Australian Young People: An Examination of Risk and the Impact of Situational Factors

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ABSTRACT

Youth family violence is a significant public health and social problem which constitutes approximately 10 - 26 percent of all police-reported family violence incidents (Coghlan & Millsteed, 2017; Phillips & McGuinness, 2020; Snyder & McCurley, 2008). However, these reports are only a small sub-section of the family violence used by young people, with the majority of such violence being unknown to police and other services (Fitz-Gibbon et al., 2018; Kuay & Towl, 2021). This is possibly one reason that research about family violence by young people is relatively underdeveloped. In particular, evidence about effective risk assessment and management practices in this area is almost non-existent. Further, there has been a tendency for research on youth family violence to focus on individual relationships of abuse (e.g. child-to-parent abuse, intimate partner abuse) or a narrow period of youth (e.g. under 18 years), rather than recognise the potential for violence to occur across multiple relationships and continue into young adulthood (Simmons et al., 2018). This does not reflect the reality that many youth-specific services are required to engage with young people up to 25 years of age (McGorry et al., 2022), and police are required to respond to individuals of all ages who engage in abusive or violent behaviour across a range of relationships, indicating a need to recognise the diversity of this form of family violence.

The aims of the present thesis are to address some of these shortcomings and are three-fold. The thesis sought to (1) advance knowledge of characteristics related to policereported youth family violence, including how they vary according to age and history of prior offending, to (2) improve understanding of recidivism risk and risk assessment among young people reported to police for using family violence, and (3) identify situational factors relevant to police-reported incidents of youth family violence. This information is important not only for police and youth services who assess and manage risk of youth family violence,

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but also provides important information to inform future theory development and the creation of evidence-based interventions for this cohort. It should be noted that the present thesis uses the terms *family violence-user* and *young person who uses family violence* in recognition of the need to consider young people as more than their behaviour, and to encourage a person-centred approach to conceptualising youth family violence.

A pseudo-prospective population cohort design was adopted, involving the analysis of all police-reported family violence incidents in the Australian state of Victoria over a fourmonth period (1 September to 31 December 2019) in which a young person aged 10-24 years (inclusive) was listed as the primary user of family violence (N = 5014). This sample was drawn from all 24,419 family violence incidents recorded by police during the same period. In addition, a subsample of police narratives (n = 82), drawn from the sample of youth family violence incidents (N = 5014), was examined to address the third research aim.

This thesis comprised four related empirical studies. The first study examined agerelated differences in sociodemographic, psychosocial, and family violence-related characteristics of young people who engage in abusive behaviour according to three key developmental periods: early adolescence (10-14 years), late adolescence (15-19 years), and young adulthood (20-24 years). The findings suggested that young people who were reported to police for using family violence were typically male and disproportionately from low socioeconomic backgrounds and rural/regional locations. There were similar rates of policeidentified mental health issues and family violence recidivism across age groups. Age-related variation in other characteristics was observed however, with substance abuse, unemployment/school truancy, and intimate partner abuse higher among those in late adolescence and young adulthood, while accessibility needs, child-to-parent abuse, and police-reported family violence victimisation during childhood (aged 0-11 years) were higher among those in early adolescence. The findings highlight the importance of developmentally-

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informed risk assessment, management, and intervention practices with young people who use family violence.

Validation studies of family violence risk assessment tools have typically considered young people as a homogenous group, with no examination of whether the discriminative and predictive validity vary according to the sex, relationship of abuse, or age of the young person. The second study examined base rates of youth family violence recidivism and validated the Victoria Police Screening Assessment for Family Violence Risk (VP-SAFvR) for use with young people aged 10-24 years. The six-month family violence recidivism base rate among young people was 24.24% for same-dyad recidivism (i.e. abusive behaviour was directed at the same victim as the original police report) and 35.31% for any-dyad recidivism (i.e. abusive behaviour directed toward either the same victim or a different victim). The VP-SAFvR was found to be valid for use with young people across age ranges, displaying moderate discriminative validity and appropriate classification statistics with those aged 10-24 years (AUC = .65). Sub-analyses showed moderate discriminative validity across age (AUC = .64-.67), sex (AUC = .63-.65), and relationship of abuse (AUC = .62-.65). Predictive validity was adequate at a threshold score of four for those aged 15-24 years, however predictive validity for those aged 10-14 years was improved at a threshold score of three. A threshold score of is applied to the tool so that any individual who scores at, or above, the threshold is referred on to Victoria Police's Family Violence Intervention Unit for specialist review, as they are identified as being at an elevated risk for future family violence. These results demonstrate the utility of an existing structured risk tool for young family violenceusers and demonstrate the importance of validating tools with reference to a young person's age.

The third study examined characteristics of and recidivism risk among young people categorised as either family-only (i.e. had only ever come to police attention for using family

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violence) or generalist (i.e. had come to police attention for both family violence and other offending behaviour) family violence-users. Prior work demonstrates that adults who engage in both family violence and other offending behaviour (i.e. generalists) comprise between 42-96% of all adult family violence-users, and display more violence-associated risk factors and greater risk of future family violence and offending than those who only engage in family violence (i.e. family-only). Despite the important implications for risk assessment and management, there has been a lack of robust research comparing generalist and family-only subtypes among young people. Consistent with the adult literature, generalist young people displayed more significant histories of family violence behaviour, higher levels of criminogenic (i.e. substance abuse and unemployment/school truancy) and non-criminogenic need (i.e. mental health issues and history of police-reported family violence victimisation), and were significantly more likely to engage in family violence recidivism within six months of the index incident. Additionally, generalists who had engaged in three or more non-family violence offence types were significantly more likely to engage in family violence recidivism than generalists who had engaged in two or fewer different types of offending. These results highlight the elevated level of risk and need among young generalist family violence-users, with important implications for risk assessment and management.

The fourth and final study identified situational characteristics of child-to-parent abuse (n = 82) within police narratives using content analysis. Implications for risk assessment, risk management, and intervention were explored. Situational factors are highlighted within the literature as important to the initiation and maintenance of violence and aggression and have been used to develop dynamic risk assessment tools. The findings of the fourth empirical study found that interpersonal conflict (e.g. verbal arguments) and parental limit-setting (e.g. denying a young person's request, enforcing rules) were the most common immediate antecedents of child-to-parent abuse, with additional situational factors

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including mental health issues, role of the third parties, presence of weapons, and substance abuse. Implications for assessment and intervention were discussed.

Taken together, the findings of this thesis highlight the need for risk assessment and management approaches to be developmentally informed, with approaches tailored to the young person's age and history of prior offending, as well as the role of situational antecedents in the young person's use of family violence. Recognition of these factors assists in theory development and helps provide a foundation from which risk assessment and management approaches for youth family violence can be developed. This thesis represents one of the first comprehensive bodies of work which has attempted to integrate knowledge of youth development and the various forms of abusive behaviour to inform understanding of risk and risk assessment practice with young people who engage in family violence.

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To my DPsych people – **The second sec**

DECLARATION

I, the candidate, declare that the contents of this thesis:

- 1. Contains no material which has been accepted by me for the award of any other degree at any other university or equivalent institution.
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LIST OF ACRONYMS

Alphabetical list of commonly used acronyms

ABS	Australian Bureau of Statistics
AIHW	Australian Institute of Health and Welfare
AUC	Areas Under the Curve
СРА	Child-to-parent abuse
DVSI-R	Domestic Violence Screening Instrument- Revised
FV	Family Violence
FVR	Family Violence Report
HR	Hazard Ratio
IPA	Intimate Partner Abuse
IRSAD	Index of Relative Socioeconomic Advantage and Disadvantage
LEAP	Law Enforcement Assistance Program
NPV	Negative Predictive Value
PPV	Positive Predictive Value
RCFV	Royal Commission of Family Violence (Victoria)
RNR	Risk-Need-Responsivity
SEIFA	Socio-Economic Indexes for Areas
SES	Socioeconomic Status
SPSS	Statistical Package for the Social Sciences
SPJ	Structured Professional Judgement
VP-SAFvR	Victoria Police Screening Assessment for Family Violence Risk
WHO	World Health Organisation

PUBLICATIONS AND OUTCOMES OF THE RESEARCH

Submitted Manuscripts

- Sheed, A., McEwan, T., Simmons, M., Spivak., & Papalia, N. (submitted). Characteristics of young people who use family violence in adolescence and young adulthood: an agebased analysis. *Journal of Family Violence*. (Chapter Five)
- Sheed, A., McEwan, T., Papalia, N., Spivak., B., & Simmons, M. (under review). Assessing risk of family violence by young people: identifying recidivism base rates and the validity of the VP-SAFvR for youth. *Criminal Justice and Behaviour*. (Chapter Six)
- Sheed, A., Simmons, M., Spivak., B., Papalia, N., & McEwan, T. (in press). The relevance of prior offending to risk and need in youth family violence: a population cohort study. *Journal of Family Violence*. (Chapter Seven)
- Sheed, A., Maharaj, N., Simmons, M., Papalia, N., & McEwan, T. (under review). The role of situational factors in child-to-parent abuse: implications for assessment, management, and intervention. *International Journal of Offender Therapy and Comparative Criminology*. (Chapter Eight)

Presentations

- Sheed, A. (March 2022). *Understanding Family Violence Use by Young People*. Presented to the Victoria Police Family Violence Intervention Unit Forum, Melbourne.
- Sheed, A. (April 2022). Understanding Family Violence Use by Young People. Presented as professional development to Forensicare Youth Justice Mental Health Program staff, Melbourne.
- Sheed, A. (June 2022). Understanding Family Violence Use by Young People. Presented to the Goulburn Valley Family Violence Operations Group staff, Victoria.

PART I: THESIS OVERVIEW AND LITERATURE REVIEW Chapter One: Thesis Overview

1.1.Background and Rationale

Family violence by young people aged 10-17 years constitutes approximately one in ten of all police-reported incidents of family violence (Phillips & McGuinness, 2020). Over half (55%) of all those reported to police for using family violence as an adolescent will continue to use family violence into young adulthood (Boxall et al., 2021). Additionally, between 36-85% of adolescent and young adult family violence-users engage in both family violence and other offending behaviour (Boxall & Sabol, 2021; Moulds et al., 2019; Verbruggen et al., 2021), and a substantial minority of young people (between 16-38%; Boxall et al., 2020; Boxall & Sabol., 2021; Desir & Karatekin, 2018) are abusive across multiple relationships. Such research highlights the prevalence and impact of youth family violence, its persistence across developmental periods, and the interconnectedness of different forms of family violence and other offending behaviour.

Unfortunately, current academic inquiry into youth family violence tends to focus on a single relationship of abuse (e.g. child-to-parent abuse, intimate partner abuse, sibling abuse, child maltreatment, other family abuse) and the narrow period of adolescence (aged between 10 and 18 years; Boxall & Sabol, 2021; Izaguirre & Calvete, 2017; Reyes et al., 2016; Shaffer et al., 2022). However, scholars are slowly beginning to include young adults (aged 20-24 years; World Health Organisation, 2021) and multiple relationships of abuse in their research (Boxall & Sabol., 2021; Fernández-González et al., 2021; Jennings et al., 2017; Simmons et al., 2022). A narrow approach to conceptualising youth family violence has resulted in a lack of attention to the connections between various forms of family violence (Chan et al., 2021; Hamby & Grych, 2013) and underrepresents the true extent and negative impact of abusive behaviour by young people (Hamby & Grych, 2013). Similarly, police and

other services interact with young people who may engage in several relational forms of abuse, as well as other offending behaviour. This indicates a need for research to recognise the interconnectedness of these patterns of behaviour to ensure findings can usefully inform practice.

Additionally, there is a need for additional youth-specific research examining risk assessment and management among young people who engage in family violence. There has been substantial investment in identifying the characteristics and recidivism risk of adult family violence-users, including the generation of over 39 different instruments for the assessment of intimate partner violence risk alone (van der Put et al., 2019). While youth family violence has been the subject of increasing attention over recent decades (Bowen & Walker, 2015; Simmons et al., 2018), research attempting to apply knowledge of youth family violence characteristics and recidivism risk to the process of risk assessment and management is limited to a small number of studies (Tapp et al., 2016; Loinaz & de Sousa, 2019; Shaffer-McCuish, 2020), which are hampered by several limitations.

Most studies attempting to create or validate risk assessment tools for youth family violence examine a single relationship of abuse (e.g. child-to-parent abuse or intimate partner abuse; Bowen & Walker, 2015; Loinaz & de Sousa, 2019; Shaffer et al., 2022; Tapp et al., 2016), focus on identifying risk factors rather than predicting risk of future family violence (Bowen & Walker, 2015; Loinaz & de Sousa, 2019; Tapp et al., 2016), and are insufficiently validated with the broader youth population (Bowen & Walker, 2015; Tapp et al., 2016).

Scholars have identified the need for "substantial development" (Tapp et al., 2016, p. 284) within the field of youth family violence risk assessment and management. Some literature identifying the characteristics of young people known to use family violence has developed over the past two decades (Boxall & Sabol., 2021; Cottrell & Monk, 2004; Jennings et al., 2017; Simmons et al., 2018), but there is a need to link this knowledge to the

process of risk assessment and risk management (Bowen & Walker, 2015; Shaffer et al., 2022; Tapp et al., 2016). Similarly, rather than continuing to identify characteristics of young family violence-users retrospectively, a concerted effort is needed to determine whether such risk factors predict future family violence. Among those studies which have attempted to develop risk assessment protocols, a review by Tapp et al. (2016) on dating violence risk protocols identified that many instruments relied solely on self-report information, rather than including both self-report and collateral information. Similarly, research into risk assessment and management of youth family violence should continue to expand beyond relying on self-report data from community samples to include official, otherwise known as administrative, data sources.

Research based on official statistics, such as those recorded by police, may be particularly valuable when attempting to link characteristics of youth family violence and recidivism risk to the process of risk assessment and management. Police are often the first responders to incidents of family violence (Dowling et al., 2018) and they record information at the time of the index incident. This information typically pertains to a wide array of victim and family violence-user characteristics (Jolliffe Simpson et al., 2021; McEwan et al., 2019; Williams & Grant, 2006) and is obtained from multiple sources (e.g. family, third parties, family violence-user; McEwan et al., 2019; Williams & Grant, 2006). Police also come in contact with young people and families using/experiencing more persistent, frequent, and severe forms of abuse (Voce & Boxall, 2018), indicating this cohort is likely at an elevated risk of future family violence and in greater need of risk assessment and management.

Another area which remains substantially under-developed, yet which has been recognised as important for the purposes of risk assessment and management (Borum, 2000; Ogloff & Daffern, 2006; Otto & Douglas, 2021), is the role of situational factors in the initiation and maintenance of violent behaviour. While there has been some examination of

situational factors in relation to youth family violence, there are three key limitations of the literature. First, much of the research is two or more decades old (Cottrell & Monk, 2004; Eckstein, 2002; Evans & Warren-Sohlberg, 1988; Laurent & Derry, 1999). Second, it relies on convenience or purposive sampling methods (Cottrell & Monk, 2004; Eckstein, 2002; Oviedo, 2019; Retford, 2016), which are prone to researcher bias and issues associated with sample representativeness. Third, two of the more recent peer-reviewed studies appear to have selected situational factors for examination a priori (Freeman, 2018), or situational information was mentioned briefly as a means of contextualising other descriptive information (Purcell et al., 2014). Such approaches are problematic as they can result in a range of situational factors being overlooked or not explored in sufficient detail to support their use in assessment, management, or intervention practices. There is a need for greater understanding of the situational characteristics associated with incidents of youth family violence, as this knowledge can be used to identify the proximal drivers of abusive events, and improve understanding of how best to assess and prevent future violence.

1.2.Overarching Aims

The present thesis seeks to (1) advance knowledge of the characteristics related to police-reported youth family violence, including how they vary according to age and history of prior offending, to (2) improve understanding of recidivism risk and risk assessment for young people reported to police for using family violence, and (3) identify situational factors relevant to police-reported incidents of youth family violence. Knowledge derived from this thesis will contribute significantly to the existing literature, where few studies have attempted to translate findings for the purposes of risk assessment and management.

Research Aim One: Advance knowledge of the characteristics related to police-reported youth family violence, including how they vary according to age and prior offending The first aim of this thesis is to advance knowledge of the characteristics related to police-reported youth family violence, with reference to how they vary according to age and history of prior offending. This is addressed in the first (Chapter Five) and third (Chapter Seven) papers. The first paper provides a descriptive overview of young people reported to police for using family violence, and examines the age-related variation in sociodemographic, psychosocial, and family violence-related characteristics of young people according to three key developmental periods: early adolescence (10-14 years), late adolescence (15-19 years), and young adulthood (20-24 years). The third paper examines how the characteristics of young family violence-users vary according to whether they had ever been reported to police for both family violence and other offending (i.e. generalist youth), or whether they had only ever been reported to police for using family violence for using family violence (i.e. family-only youth).

Understanding how the characteristics of youth family violence differ according to age and history of past offending is important for the purposes of risk assessment, risk management, and intervention. The ongoing development of young peoples' personality and behaviour throughout adolescence and young adulthood means that age can affect the saliency of static and dynamic risk factors (Borum, 2000, 2016; van der Put et al., 2011, 2012) and represents a key responsivity consideration (Higley et al., 2019). Similarly, younger age and prior offending have been shown to be associated with higher rates of general and violent recidivism (Katsiyannis et al., 2018; Piquero et al., 2015), further supporting their relevance to the assessment and management of risk (Borum, 2016; Hilton & Eke, 2016; Petersson & Strand, 2020). Risk assessment, management, and intervention approaches need to be developmentally informed (Borum, 2016) and cognisant of the connection between the different relational forms of family violence (e.g. child-to-parent abuse, intimate partner abuse, sibling abuse, child maltreatment, other family abuse) and

other offending behaviour (Farrington & Ttofi, 2021; Hamby & Grych, 2013; Petersson & Strand, 2020).

Research Aim Two: Improve understanding of family violence recidivism risk and risk assessment among young people reported to police for using family violence

The second aim of this thesis is to improve understanding of family violence recidivism risk and risk assessment among young people reported to police for using family violence. This will primarily be addressed in the second (Chapter Six) and third (Chapter Seven) papers. The second paper identifies six-month base rates of family violence recidivism for police-reported youth family violence and examines the utility of the Victoria Police Screening Assessment for Family Violence Risk (VP-SAFvR; McEwan et al., 2019) for young people. The third paper examines how generalist youth (those who have come to police attention for both family violence and prior offending) differ from family-only youth (i.e. those only known to police for using family violence) in relation to family violence recidivism outcomes.

In order to appropriately assess and manage risk, it is important to understand the base rate of the behaviour in question (Meehl & Rosen, 1955; Singh, 2013), ensure tools are validated for the population with which they are used, and understand whether some groups of people are higher risk than others (Singh, 2013). The six-month base rate of family violence recidivism has previously been identified for adolescents (aged 12-18 years; Boxall and Morgan, 2020). However, the combined base rate of family violence recidivism across adolescence and young adulthood (i.e. 10-24 years) has not been investigated, nor has the rate of recidivism across different developmental periods (i.e. 10-14 years, 15-19 years, 20-24 years). Similarly, while some family violence risk tools, including the VP-SAFvR (McEwan et al., 2019; Spivak et al., 2021), have been validated for use with adolescents (Jolliffe Simpson et al., 2021; Williams & Grant, 2006), these studies typically examine young people

as a homogenous group, with no consideration given to the role of age, sex, or relationship of abuse in the examination of the tool's validity.

Research Aim Three: Identify situational factors relevant to police-reported incidents of youth family violence

The third aim of this thesis is to identify situational factors relevant to police-reported incidents of youth family violence, which is primarily addressed in Chapter Eight. Situational characteristics surrounding violent events are a central part of theories/models of aggression and violence in close relationships (Anderson & Bushman, 2002; Cicchetti & Lynch, 1993; Slotter & Finkel, 2011; Stairmand et al., 2021). These theories and models implicate situational factors in the initiation and maintenance of aggressive behaviour (Anderson & Bushman, 2002; Slotter & Finkel, 2011), and have the capacity to both escalate and deescalate violent incidents (Anderson & Bushman, 2002; Ogloff & Daffern, 2006).

Reflecting their important role as antecedents of aggression and violence, situational factors have informed the development of risk assessment instruments designed to assess risk for imminent violence (Daffern & Ogloff, 2009; Ogloff & Daffern, 2006; Woods & Almvik, 2002). Yet, such factors are infrequently considered in the literature in relation to the assessment and management of general violence risk (particularly in relation to family violence), or as a means of developing individualised interventions. Detection of key situational antecedents of youth family violence may assist in identifying and addressing common triggers of abuse through family- or couples-based interventions and short-term risk management approaches. The information identified in this study may also assist clinicians in identifying common antecedents of abuse, which can be used to inform functional analysis and scenario planning for young people who engage in family violence.

1.3. Structure of the Thesis

This thesis is submitted by associated papers and, as such, some repetition of information is inherent. The present chapter (Chapter One) provides an overview of the thesis and articulates the three key aims. A review of the literature is then provided to assist readers to understand the existing evidence related to youth family violence (Chapters Two and Three). The methodology of the empirical papers will then be outlined (Chapter Four), followed by the four papers (Chapters Five, Six, Seven and Eight). Finally, a discussion integrating the overall findings and implications of the four papers will be presented (Chapter Nine). Directions for future research will also be discussed.

Chapter Two: Understanding Youth Family Violence

2.1. Conceptualisation of 'Youth' and 'Young People' in the Legal System

The World Health Organisation (WHO, 2021) defines adolescents as those aged 10-19 years, and young people as those aged 10-24 years. The inclusion of those between the ages of 18 – 24 years in definitions of 'young people' aligns with research showing continued biological and psychosocial development into young adulthood (Johnson et al., 2009). This prolonged period of development is noted to be particularly apparent among those from industrialised nations where there are fewer cultural imperatives to enter full adulthood (Arnett, 2000; Sokol, 2009). Young people from such cultures are increasingly likely to still live at home, be developing their sense of identity, and engaging in role experimentation (Arnett, 2000). Although some movement has been made to recognise the role of developmental immaturity in offending and other antisocial behaviour among young people, most of society, and indeed various legal jurisdictions, continue to demarcate adolescence from adulthood as using the arbitrary age of 18 years (Cohen et al., 2015; Steinberg, 2017). However, it must be noted that many jurisdictions are increasingly treating young people up to 21 years of age in accordance with youth-informed sentencing guidelines (Chalton et al., 2019; Cohen et al., 2015).

Proponents of developmentally informed judicial systems cite research showing brain maturation continues well into the second decade of life (Chalton et al., 2019; Cohen et al., 2015; Scott et al., 2016). Compared with adults, young people, including those in their early twenties, display poorer executive functioning capabilities which, coupled with an increased likelihood of risk-taking and a desire for independence, significantly reduce their capacity to make sound decisions and increases their risk of contact with the criminal justice system (Chalton et al., 2019; Richards et al., 2011; Scott et al., 2016; Syngelaki, et al., 2009). Further, police and many youth service organisations within Australia (McGorry et al., 2022;

Royal Commission into Family Violence (RCFV), 2016) and internationally (McGorry et al., 2022) are required to engage with young people up to age 25 years. This indicates a greater need to conceptualise the period of youth as extending across adolescence and into young adulthood.

2.2. Understanding Youth Family Violence

2.2.1. Defining Youth Family Violence

Broad definitions of family violence are increasingly being adopted across many jurisdictions in recognition of the variety of abusive behaviours which can be employed, and the various relationships in which such behaviours can be enacted (Boxall & Sabol., 2021; Farrington & Ttofi, 2021; Joliffe Simpson et al., 2021; Phillips & McGuinness, 2020; Snyder & McCurley, 2008; Spivak et al., 2021). These definitions identify family violence as involving abuse toward relatives (e.g. parents, siblings, other relatives) and abusive behaviour towards dating or intimate partners, with both physical (e.g. physical assault, sexual assault, etc.) and non-physical (e.g. psychological abuse) abuse recognised under the umbrella of family violence. Additionally, in many jurisdictions, legislative definitions of family violence include behaviours that are not otherwise criminal (Jolliffe Simpson et al., 2021; Miles & Condry, 2016; Spivak et al., 2021).

These broad definitions are particularly relevant to youth family violence, given definitions that focus solely on abuse within an intimate partnership overlook a substantial proportion of the family violence that young people engage in (Phillips & McGuinness, 2020; Synder & McCurley, 2008). Similarly, broader definitions reflect the fact that common risk factors underlie various forms of violence (Hamby & Grych, 2013). Indeed, emerging evidence indicates young people reported to police for using family violence may engage in abusive behaviour across more than one type of relational dyad (e.g. child-to-parent abuse, intimate partner abuse, sibling abuse), as well as outside the family context (Boxall & Sabol.,

2021; Moulds et al., 2019; Phillips & McGuinness, 2020; Snyder & McCurley, 2008). This suggests the need to consider multiple relational forms of abuse concurrently to ensure the broader phenomenon of youth family violence is comprehensively understood.

2.2.2. Relational Forms of Youth Family Violence

The range of behaviours that constitute family violence by young people are poorly defined and vary according to research methodology and state-based incident reporting process. As noted by Fitz-Gibbon and colleagues (2018), while legislation typically outlines the range of behaviours which constitute family violence, family violence typically does not manifest as one particular type of abusive act. Research by Fitz-Gibbon et al. (2018) and Simmons et al. (2018) indicate that family violence by young people is a complex phenomenon often characterised by ongoing abuse involving multiple types of aggression and/or violence (e.g. emotional, financial, verbal, sexual, and/or physical abuse). Young people have also been shown to use such violence toward different individuals close to them, including parents and carers, intimate partners, and siblings (Fitz-Gibbon, 2018). Four key relational patterns of family violence used by young people will be discussed in this chapter: child-to-parent abuse, intimate partner abuse, sibling abuse and child maltreatment (i.e., parent-to-child abuse). The primary relationships of abuse which are considered in the youth family violence literature are child-to-parent abuse, intimate partner abuse, and sibling abuse. Child maltreatment is rarely considered in research examining young people as users of family violence, however is included in the present thesis given young parental age is noted as a significant risk factor for child maltreatment (Brown, et al., 1998; Stith et al., 2009).

2.2.2.1. Child-to-Parent Abuse

Child-to-parent abuse captures "the full range of physical, emotional, and psychological aggression that may be enacted by a child toward their parent" (Simmons et al., 2018, p. 24). Family violence by young people accounts for approximately 10% of all police-

reported family violence incidents in Victoria, Australia (where the present research was conducted), with approximately 60% of these involving parents as the victim (Phillips & McGuinness, 2020). Prevalence rates with community-based samples of adolescents suggests the 12-month incidence of physical child-to-parent abuse is between 5% and 21%, while prevalence of verbal, psychological, and emotional child-to-parent abuse ranges from 33-93% (Simmons et al., 2018). The prevalence of child-to-parent abuse among adolescents involved in the justice system varies according to the samples used, however it is implicated in 85% of adolescent restraining orders (Purcell et al., 2014; Simmons et al., 2018), and 40-60% of adolescent domestic violence charges (Simmons, 2018; Snyder & McCurley, 2008).

The child-to-parent abuse literature indicates several demographic and personal characteristics which are common among young people who engage in this form of abusive behaviour. Research using official data shows males engage in all forms of family violence more often than females (Phillips & McGuinness, 2020; Purcell et al., 2014; Simmons et al., 2018; Snyder & McCurley, 2008). This includes child-to-parent abuse, where mothers are usually found to be the primary target (Phillips & McGuinness, 2020; Simmons et al., 2018; Snyder & McCurley, 2008). Childhood exposure to family violence and victimisation are prevalent among young people who engage in child-to-parent abuse (Cottrell & Monk, 2004; Phillips & McGuinness, 2020; Simmons et al., 2018), as are mental health issues (Cottrell & Monk, 2004; Kennedy et al., 2010; Peck et al., 2022; Phillips & McGuinness, 2020; Simmons et al., 2018), problems with school engagement (Cottrell & Monk, 2004; Simmons et al., 2018), familial dysfunction (Cottrell & Monk, 2004; Pagani et al., 2004, 2009; Simmons et al., 2018), and broader patterns of antisocial behaviour displayed by the young person (Moulds et al., 2019; Simmons et al., 2018). Child-to-parent abuse is most prevalent among adolescents but is overtaken by intimate partner abuse as the most common form of family violence as individuals enter young adulthood (Snyder & McCurley, 2008).

2.2.2.2. Intimate Partner Abuse

Intimate partner abuse refers to a pattern of aggressive or violent behaviour intended to cause harm to a partner (or former partner) who wishes to avoid such harm (Daff, 2019). Frequently referred to as 'dating violence', youth intimate partner abuse may involve physical, psychological, sexual, economic, or cyber behaviours, which vary in frequency and severity (Daff, 2019; Jennings et al., 2017; Phillips & McGuinness, 2020).

In their systematic review of the prevalence of intimate partner abuse among young people aged 15-30 years, Jennings and colleagues (2017) found the incidence of intimate partner abuse ever experienced by adolescents and young adults aged 15-30 years ranged from 6% to 21.8% for males, and 9% to 37.2% for females. These figures were drawn primarily from studies sampling high school and university students (Jennings et al., 2017). Official statistics from the National Incident-Based Reporting System in the United States indicate between 11% and 16.4% of adolescent (aged 10-18 years) family violence incidents involve intimate partner abuse, compared to 51% of domestic assaults by young adults (aged 18-24 years; Snyder & McCurley, 2008).

Australian and American research using official data suggests males most frequently target female victims in cases of youth intimate partner abuse (Phillips & McGuinness, 2020; Snyder & McCurley, 2008). However, gender differences are less pronounced than in cases of adult intimate partner abuse reported to police (Phillips & McGuinness, 2020), and when self-report measures are used (Daff et al., 2018). Similarly, compared to adults, adolescent cases of intimate partner abuse are significantly less likely to involve controlling or jealous behaviour and alcohol abuse, but are more likely to involve the use of sexual violence, criminal offences, and feelings of suicidality by the young person who is being abusive (Phillips & McGuinness, 2020).

2.2.2.3. Sibling Abuse

Sibling abuse is identified as one of the most common, yet least studied and most under-reported, forms of family violence (Elliott et al., 2020; Straus et al., 1990). Sibling abuse is a form of family violence which is carried out by an individual against their brother or sister, and which may include different forms of violence, such as physical, emotional, sexual, psychological, and economic abuse (Elliott, et al., 2020). The common discourse surrounding aggression between siblings is that it is a normal part of development and the sibling relationship, however research has suggested that when it escalates into a pattern of abuse it can have serious psychological and physical consequences (Khan & Cooke, 2008; Meyers, 2017; Underwood & Patch, 1999).

Most of the literature examining sibling abuse involves pre-school and early primary school-aged children and involves significant variations in terminology (i.e. abuse, aggression, bullying, victimisation; Tucker et al., 2013). The inclusion of such young children and an amalgamation of vastly different forms of aggression and violence with no attention to patterns of behaviour significantly clouds the quality of conclusions which can be drawn from the available literature. The present thesis largely excludes studies which focus on pre-school and early school-aged children.

Krienert and Walsh (2011) examined sibling violence in the United States using national data from the National Incident-Based Reporting System between 2000-2005 (N =33,066). They found that young people between 14-17 years old were the age group which engaged in the most acts of physical sibling violence (39.8%), compared to children aged under 14 years (12.7%), and those aged 18-21 years (37.6%). Tucker and colleagues (2013) similarly found those aged 14-17 years experienced the highest rate of injury using survey data from American adolescent school students. Most incidents of sibling abuse (51.5%) resulted in minor injury, with 3.1% involving major injury (Krienert & Walsh, 2011). Khan

and Cooke (2008) examined severe inter-sibling violence among Scottish youth (aged 10-19 years) under the care of the criminal justice or welfare systems. Of the total sample, 36% reported engaging in deliberate violence towards siblings, with victims experiencing burns, broken limbs, and puncture wounds requiring professional intervention. Life-threatening violence and lifetime injuries were reported by 9% of this forensic sample (Khan & Cooke, 2008).

Research using official data shows males are more likely to engage in sibling abuse than females (Krienert & Walsh, 2011; Walker & Woerner, 2018) and are also more likely to target female victims (Krienert & Walsh, 2011; Snyder & McCurley, 2008; Walker & Woerner, 2018). This gendered dynamic is consistent with the broader family violence literature drawing on administrative data.

2.2.2.4. Child Maltreatment

Child maltreatment perpetration is rarely considered when examining the topic of family violence by young people, however young parental age has consistently been shown to be a risk factor for child abuse and neglect (Brown et al., 1998; Doidge et al., 2017; Stith et al., 2009). The World Health Organisation (WHO, 2020) defines child maltreatment as all forms of abuse and neglect that occur to children under 18 years of age, however examination of this topic becomes complicated when the parent is also aged under 18 years, or is a young adult. Within this thesis, child maltreatment will be exclusively referred to in the context of a young person (aged 10-24 years) who engages in the maltreatment of their own child or step-child. This retains the focus on violence within the family context.

To date, there have been no comprehensive statistics published regarding the prevalence of child maltreatment by young parents. The research in this area can be complicated by the reluctance of researchers and clinicians to identify a young person as engaging in child maltreatment when they themselves are frequently still a child who

continues to undergo significant psychosocial and neurological development (Giedd & Denker, 2015; Lenroot & Giedd, 2006), and may also have been, or continue to be, a victim of child abuse or neglect (Brown et al., 1998; Steinberg & Cauffman, 1996). Yet, research shows that those who have experienced childhood maltreatment and victimisation are more likely to go on to engage in child maltreatment as a young adult (although the majority of victims do not go on to abuse others; Ben-David et al., 2015; Milaniak & Widom, 2015).

While research suggests that young parental age is a risk factor for child abuse and neglect, a direct causal link may be too simplistic a conclusion to draw. More nuanced research suggests that the relationship between young parenthood and child abuse is frequently confounded by factors relating to low socioeconomic status (SES) and poverty, among others (Budd et al., 2000; Kinard & Klerman, 1980). The literature suggests that both teen parenthood and child maltreatment occur more frequently among those from lower SES backgrounds, with poverty potentially serving as a source of frustration and anger, and reducing the amount of support available to already vulnerable young parents (Kinard & Klerman, 1980), thus increasing the risk of maltreatment. Furthermore, other factors which are typically associated with child maltreatment are also more frequently experienced by those from lower SES backgrounds, including single-parent households, substance misuse, and parental depression (Kinard & Klerman, 1980).

Therefore, while it is possible to simply attribute the increased presence of child maltreatment among young parents to their youthful age, this is far too simplistic, and it is imperative that a thorough examination of additional risk and protective factors be conducted to ensure a more nuanced approach to risk assessment amongst an already vulnerable group of young people.

2.2.3. Using Theory to Understand Youth Family Violence

Young people's propensity to engage in antisocial behaviour, including family violence, is influenced by risk and protective factors which exist across all levels of their ecology, and can be understood with reference to existing theories. Bronfenbrenner's (1979) Ecological Systems Theory and Dutton's (1994, 2006) Nested Ecological Model have been used to conceptualise instances of child-to-parent abuse (Simmons et al., 2018) and youth intimate partner abuse (Daff, 2019), as have the General Aggression Model (GAM) and the I³ (pronounced I-cubed; Finkel, 2014; Slotter & Finkel, 2011) theory (Daff, 2019; Daff et al., 2020; Simmons et al., 2022). Both the GAM and the I³ theory highlight the role of individual and situational factors as drivers and inhibitors for such behaviour (Anderson & Bushman, 2002; Slotter & Finkel, 2011). These theories will be explored more in section 3.7 of this thesis, while the present section will focus on the importance of taking an ecological and developmental approach when working with young people who engage in abusive behaviour. Examination of factors at multiple levels of a young person's ecology, and how these interact with the developmental fluctuations experienced by young people, allows a developmentally-informed approach to explaining youth family violence.

Drawing on ecological theories, factors influencing youth family violence can be categorised hierarchically into the Ontological, Microsystem, Exosystem, and Macrosystem levels (Bronfenbrenner, 1979; Dutton, 1994, 2006). Ontological factors refer to characteristics of the individual (biological, psychological, attitudinal), which may predispose a young person to engage in abusive behaviour and which are heavily influenced by the broader ecological levels higher in the framework. The Microsystem refers to key relationships within a young person's life (e.g. family, peers, intimate relationships); the Exosystem includes characteristics of the broader social network (e.g. neighbourhood,

school); and the Macrosystem refers to variables which operate at the societal or cultural level (e.g. societal norms and values).

In addition to the utility of this ecological framework, a developmental perspective is essential when investigating youth family violence. Developmental psychopathology is a theoretical framework from which psychological disorders and maladaptive behaviour can be studied (Cicchetti, 2010). An essential premise of this framework is that disturbance to the young person's developmental processes can significantly impact their ability to relate to others and the world around them, resulting in an increased risk for psychological disorders and dysfunctional behaviour (Rudolph et al., 2016). However, it must also be recognised that such deviations from normative development may simply be representative of behavioural or temperamental extremes which arise from an individual's genetic and environmental makeup, rather than from psychopathological processes (Frick & Viding, 2009).

The field of developmental psychopathology frequently refers to the notion of the "average expectable environment" (Cicchetti & Valentino, 2006, p. 129) for promoting normal development. Infants, for example, require protection, nurturance and socialisation, while older children and adolescents require supportive family, peers and continued opportunity for growth within a safe environment (Cicchetti & Valentino, 2006). It is when the environment does not fall within this expectable range that normal development is hindered, and dysfunction can arise (Cicchetti & Valentino, 2006).

One of the key means of studying developmental psychopathology is through the examination of child maltreatment, which has given rise to the ecological-transactional model of child maltreatment (Cicchetti & Lynch, 1993). This model incorporates the notion of the average expectable environment into an integrative ecological framework, explaining how factors at each level of a young person's ecology reciprocally influence one another and lead to dysfunctional behaviour. Basic tenets of this model include the presence of potentiating

and compensatory risk factors, which increase and decrease risk respectively, and the presumption that the levels of ecology most proximal to the child have the greatest impact on their development (Cicchetti & Lynch, 1993; Cicchetti & Valentino, 2006). These tenets may help to explain the presence of resilient outcomes for youth exposed to adverse situations.

Applying the principles underpinning ecological models to the phenomenon of youth family violence assists in broadening the focus from the abusive behaviour itself, to the factors which may contribute to a young person's use of family violence, and the environments which may foster such behaviour. The developmental perspective aids in understanding the early precursors which give rise to dysfunction in the relational context, while the ecological perspective encourages exploration beyond the individual level to investigate reciprocal interactions between the young person and their environment.

Taken together, these models indicate that a young person's abusive behaviour must be understood within the developmental and environmental context in which it is situated. For example, infants frequently use violence to communicate and achieve desired outcomes, however they lack the cognitive capacity and understanding of morality for this behaviour to be considered family violence. Similarly, children in their early primary school years display the highest levels of aggressive or inappropriate behaviour to family members (Nock & Kazdin, 2002), including early evidence of manipulation and coercion. However, their ability to use abstract and moral reasoning is still considered insufficient for their behaviour to be considered a manifestation of family violence. In contrast, adolescents and young adults are viewed as having achieved sufficient levels of knowledge regarding morality, societal norms, and consequences, as well as sufficient empathic ability, to understand the use of violence to be wrong and so are expected to inhibit such behaviour.

However, adolescents and young adults are known to differ from older adults in their impulse control (Romer, 2010), emotional regulation (Johnson, 2009) and consequential

decision-making (Romer, 2010; Steinberg & Scott, 2003), indicating the need for youth family violence to be conceptualised using a developmental perspective. These factors frequently mature with age, resulting in the rates of antisocial behaviour typically peaking in late adolescence and sharply declining thereafter (Farrington, 1986; Stander et al., 2022).

Behaviour may become dysfunctional in the context of early maltreatment and neglect (Cicchetti & Lynch, 1993), mental health and/or substance abuse issues (Buckholdt et al., 2015), or through attempted adaptation to social and economic disadvantage (Simons & Burt, 2011). Young people who engage in family violence are noted to display elevated levels of family violence exposure and victimisation (Eriksen & Jensen, 2006; Jennings et al., 2017; Phillips & McGuinness, 2020; Simmons et al., 2018), more familial strain and dysfunction (Cottrell & Monk, 2004; Eriksen & Jensen, 2006; Jennings et al., 2017; Simmons et al., 2018), schooling issues (Cottrell & Monk, 2004; Simmons et al., 2018), mental health issues (Cottrell & Monk, 2004; Kennedy et al., 2010; Peck et al., 2022; Simmons et al., 2018), substance abuse issues (Jennings et al., 2017), and lower socioeconomic security (Cottrell & Monk, 2004). Experiences of maltreatment and disadvantage throughout development can lead some young people to engage in abusive behaviour through the processes of social learning (Foshee et al., 2011; Hoffman & Edwards, 2004) and maladaptive social processing (Calvete et al., 2015; Daff et al., 2020). Similarly, the development of hostile attributions and a cynicism of social norms (Simons & Burt, 2011) which can develop as a result of such disadvantageous experiences can lead to an increased risk of engaging in antisocial behaviours.

Effective interventions for youth antisocial behaviour, including family violence, target systems and factors at varying ecological levels, including a young person's attitudes, trauma history, peer group, school engagement, and family dynamics (Moulds et al., 2019; Robinson et al., 2011). Examination of individual, microsystem and exosystem factors is

often used to guide best-practice psychological risk assessment for adolescent general and violent behaviour (Borum & Verhaagen, 2006; Hoge & Andrews, 2011). Despite this, there has been minimal application of these theories, frameworks, and interventions to the conceptualisation of youth family violence, particularly in relation to risk assessment and risk management.

2.2.4. Developmental Changes in the Presentation of Youth Family Violence

The age and developmental stage of a young person has important implications for assessment and management of risk, as age affects the salience of different static and dynamic risk factors (van der Put et al., 2011) and is a key responsivity issue (Bonta & Andrews, 2016). Adolescence and young adulthood are times of profound developmental change (Arnett, 2000) in which the biological and psychosocial needs of young people are continuously changing (Stewart et al., 2018). Young people typically experience declining levels of parental involvement which correspond with greater importance being placed on peers and intimate relationships (Giordano et al., 2003; Sanders, 2013). This is accompanied by an evolving sense of personal identity, increasing levels of personal autonomy, more risk-taking behaviour, and elevated levels of mental health issues and substance use (Blakemore, 2019; Giordano et al., 2003; Sanders, 2013). These changing needs can place stress on the family context and can contribute the changes in the presentation of family violence, and associated risk factors, with age (Sanders, 2013).

The periods of early adolescence (10-14 years), late adolescence (15-19 years), and young adulthood (20-24), as defined by the World Health Organisation (2021), are each associated with distinct developmental needs and stage-salient tasks which can affect how family violence is enacted. For example, early and late stage adolescents require a higher level of parental involvement than young adults, which may be why higher levels of child-toparent abuse are observed among adolescent youth (Phillips & McGuinness, 2020; Snyder &

McCurley, 2008). Similarly, the higher levels of peer and intimate partner involvement observed among late adolescents and young adults likely contributes to the increasing levels of intimate partner abuse seen in these age groups (Phillips & McGuinness, 2020; Snyder & McCurley, 2008).

Age-based changes in the risks and needs of young family violence-users across adolescence and young adulthood are poorly understood. Similarly, literature directly comparing young people and adults who use family violence is limited, particularly in research using official statistics. What research is available will be examined here.

Youth family violence is less gendered than adult family violence (Phillips & McGuinness, 2020; RCFV, 2016), although official statistics indicate males remain the primary users of family violence, and females the primary victims (Jennings et al., 2017; Phillips & McGuinness, 2020; Simmons et al., 2018). Phillips and McGuinness' (2020) Australian study found police-reported adolescent (12-18 years) family violence to involve more non-physical forms of violence (e.g. verbal abuse, emotional abuse) than adults, however, somewhat conversely, adolescents were significantly more likely to engage in sexual violence and be charged with associated criminal offences (Phillips & McGuinness, 2020). Studies using police data from the same jurisdiction as this thesis suggest that young adults who engage in family violence are significantly more likely to also engage in other offending behaviour than their older counterparts (Coghlan & Millsteed, 2017), and young age is associated with higher risk of family violence recidivism within the adult literature (Millsteed & Coghlan, 2016). Adult family violence is significantly more likely to involve drug and alcohol abuse than youth family violence, but less likely to involve mental health issues or suicidality (Phillips & McGuinness, 2020). These results indicate there to be a high level of need among both young people and adults who use family violence, however agebased nuances are evident.

2.2.5. Family Violence as Part of a Broader Pattern of Offending Behaviour

The best predictor of aggressive behaviour is the presence of similar behaviour in other contexts (Otto & Douglas, 2021). General violence and family violence are interconnected (Farrington & Ttofi, 2021; Hamby & Grynch, 2013), however they are often examined separately, resulting in a fragmentation of the literature. However, there is increasing recognition that diversity of offending is associated with a higher level of risk for future offending (Coghlan & Millsteed, 2017), with family violence scholars increasingly examining the role of family violence within a broader pattern of offending behaviour (Hilton & Eke, 2016; Petersson & Strand, 2020). Within the adult family violence literature, those who engage in both family violence and other offending behaviour are termed *generalists*, while those who are only known to engage in family violence are termed *family-only* individuals or *specialists* (Boyle et al., 2008; Petersson & Strand, 2020).

Individuals who use family violence are a heterogenous group (Dixon & Browne, 2003; Petersson & Strand, 2020), with the diversity of violence displayed by individuals being a popular means of distinguishing adult cohorts of family violence-users (Boyle et al., 2008; Hilton & Eke, 2016; Mach et al., 2020; Petersson & Strand, 2017). Among adult samples, prevalence estimates of generalist and family-only subgroups vary. Administrative data suggests generalists comprise between 40-96% of adult family violence users presenting to police, depending on sample source (Coghlan & Millsteed, 2017; Dowling et al., 2021; Hilton & Eke, 2016), while the family-only subgroup is believed to constitute between 48-60% of adults who use family violence (Coghlan & Millsteed, 2017; Petersson & Strand, 2020; Petersson & Strand, 2017).

Research consistently indicates that generalists display a higher level of risk for future, and more severe, family violence, as well as a more disturbed psychosocial profile than family-only individuals (Coghlan & Millsteed, 2017; Dowling et al., 2021). Compared

to family-only individuals, generalists are charged with more breach offences (Coghlan & Millsteed, 2017; Morgan et al., 2018), engage in higher levels of family and non-family recidivism (Hulme et al., 2019; Millsteed & Coghlan, 2016), use more severe family violence (Goldstein et al., 2016), and display greater treatment attrition (Cantos et al., 2019). They also display elevated levels of mental health and substance abuse problems (Coghlan & Millsteed, 2017), greater financial difficulties and unemployment (Coghlan & Millsteed, 2017), and are more likely to have witnessed interparental violence and been physically victimised as a child (Petersson & Strand, 2020). Based on this higher level of risk and need, scholars have concluded that the classification of family violence-users according to generalist/family-only subgroups should be the first step in any risk assessment and be mandatory in the assessment stage of any therapeutic intervention to enhance treatment outcomes (Petersson & Strand, 2020).

The two empirical studies available at the time of writing (see Ibabe & Jaureguizar, 2010; Moulds et al., 2019) which examine generalist and family-only young people show generalist youth display higher levels of risk and greater need than non-family offenders. An additional body of literature comparing generalist family violence-users with non-family youth offenders shows generalists have significantly higher levels of victimisation (Kennedy et al., 2010), school maladjustment (Ibabe et al., 2014), and mental health issues (Kennedy et al., 2010).

Drawing on the limited literature comparing family-only and generalist youth, generalists were found to display more schooling issues (Ibabe & Jaureguizar, 2010) and had been charged with a greater number of both family and non-family offences (Ibabe & Jaureguizar, 2010; Moulds et al., 2019). Additional research examining generalist and familyonly youth is needed as the two studies which have examined these subgroups among youth (Ibabe & Jaureguizar, 2010; Moulds et al., 2019) have both focused on child-to-parent abuse

and utilised samples in which young people have been charged. This limits the generalisability of findings to less acute samples (e.g. community samples, and those who come into contact with police but who are not charged) and to other relationships of abuse.

Taken together, the literature indicates at least half of all adults who engage in family violence have engaged in other offending behaviour. Additional research is needed to establish whether the same is true among young people. Similarly, generalists display a higher level of criminogenic and non-criminogenic need, more treatment attrition, and an elevated risk of future family violence and other offending behaviour. These findings suggest the generalist/family-only dichotomy may be pertinent for risk assessment, management and intervention with young people, however additional research is needed among young people who engage in family violence, with the scope broadened beyond the realm of child-to-parent abuse.

2.3. Summary of Chapter

Increasingly, scholars and practitioners are recognising the continuation of biological and psychosocial development as occurring beyond adolescence (10-19 years; WHO, 2021) into young adulthood (aged 20-24 years), with police and many youth service organisations required to engage with young people to 25 years of age (McGorry et al., 2022; RCFV, 2016). There is an increasing need for youth family violence research to include both adolescents and young adults (Simmons et al., 2018), given this form of abuse peaks across late adolescence and young adulthood (Simmons et al., 2018; Snyder & McCurley, 2008). In recognition of the range of abusive behaviours and various relationships in which abuse can occur (Boxall & Sabol., 2021; Farrington & Ttofi, 2021; Joliffe Simpson et al., 2021; Phillips & McGuinness, 2020; Snyder & McCurley, 2008; Spivak et al., 2021), family violence is understood as involving both physical (e.g. physical assault, sexual assault, etc.) and non-

physical (e.g. psychological abuse) forms of abusive behaviour toward relatives (e.g. parents, siblings, grandparents) and intimate partners.

There is a need for greater recognition of young people using multiple relational forms of abuse (i.e. child-to-parent abuse, intimate partner abuse, sibling abuse, child maltreatment) concurrently, and that family violence may often occur as part of a broader pattern of offending behaviour. Adding to this integrative approach of understanding youth family violence is the need to ensure such behaviour is recognised as arising out of a broader developmental and environmental context, rather than occurring idiopathically. The periods of early adolescence (10-14 years), late adolescence (15-19 years), and young adulthood (20-24) are each associated with distinct developmental needs and stage-salient tasks which can affect how family violence is enacted. Similarly, the literature shows family violence often occurs as part of a broader pattern of offending behaviour, yet there has been limited exploration of how young people who only engage in family violence (i.e. family-only youth) differ from those who engage in both family violence and other offending behaviour (i.e. generalist youth). Increasing understanding of how the characteristics of age and a history of prior offending are related to youth family violence may assist with developing a more developmentally-informed understanding of the phenomenon, and increasing recognition that it is part of a broader pattern of problematic behaviour for many young family violence-users.

Chapter Three: Understanding Risk, Risk Assessment, and the Importance of Situational Factors

3.1. Violence Risk Assessment with Young People

Born out of the adult violence risk assessment literature, there has been an increasing focus and production of assessment protocols for use with young people displaying violence, including the Structured Assessment of Violence Risk (SAVRY; Borum et al., 2006), the Dynamic Appraisal of Situational Aggression – Youth Version (DASA: YV; Daffern & Ogloff, 2009) and the Youth Level of Service/Case Management Inventory (YLS/CMI; Hoge & Andrews, 2011), although the latter is typically used to assess general recidivism.

There have been two major shifts in the way violence risk assessments are understood and conducted, both for adults and young people (Borum et al., 2006). First, there has been a movement away from the model of prediction toward the conceptualisation of risk assessment as an integral part of ongoing risk management (Douglas & Skeem, 2005). This is largely the result of an increased recognition that risk is a dynamic construct rather than a fixed binary outcome (Ogloff & Davis, 2020; Otto & Douglas, 2021). Second, there was a movement toward structuring risk assessments using actuarial and structured professional judgement (SPJ) approaches. These changes to the way risk assessment is conceptualised and conducted are demonstrated in the four generations of risk assessment frequently referred to in the literature (Andrews et al., 2006; Bonta & Andrews, 2016; Otto & Douglas, 2021).

In their most basic form, the risk factors included in risk assessment tools can be categorised as either static (historical or unchanging) or dynamic (capable of change). Dynamic factors can be further broken down into stable (factors which are prone to change slowly e.g. antisocial attitudes) and acute (capable of changing rapidly; e.g. intoxication) (Hoge & Andrews, 2010). The historical focus on static versus dynamic factors, and their relevance to the risk assessment process, has led to significant debate among scholars about

which is most useful to the assessment of risk (Otto & Douglas, 2021). While such debate is outside the scope of what is to be discussed here, it is important to understand the progression of the risk assessment literature and how it has shaped the assessment of violence risk for young people.

First generation risk assessment refers to the use of unstructured clinical judgement in the assessment of dangerousness and violence risk (Monahan, 1984). This approach relies on the clinical judgement of the assessor, with no identifiable structure involved in the decision-making process. Unstructured clinical judgement was primarily utilised during the 1970s and 1980s when no empirically validated risk factors nor means of systematically assessing violence risk had been developed (Ogloff & Davis, 2020).

Second generation risk assessment refers to the use of tools focusing on static risk factors, which primarily employ statistical risk prediction methods. Second generation methods included a greater focus on shorter-term predictions and have been shown to be more accurate than unstructured clinical judgement (Grove & Meehl, 1996; Ogloff & Davis, 2020).

Third generation risk assessment typically refers to tools which utilise dynamic risk factors, which are those factors that can change over time. These tools often include structured professional judgement (SPJ) measures, however may also include actuarial measures which incorporate dynamic risk factors (Otto & Douglas, 2021). The SPJ approach uses both static and dynamic factors alongside clinical judgement to examine the likelihood of future risk, as well as the management of such risk (Ogloff & Davis, 2020). The majority of risk assessment tools for youth are third generation, with the Structured Assessment of Violence Risk in Youth (SAVRY; Borum et al., 2006) a commonly used example.

Fourth generation risk assessment is a relatively new conceptualisation of the risk assessment process and typically relates to the nexus between risk assessment and case

management (Bonta & Andrews, 2016). However, while this is the aim of such tools, there is varying evidence as to whether risk assessment improves risk management (Viljoen et al., 2018). Fourth generation tools emphasise the need to assess the individual's risks and needs which increase their likelihood of reoffending, developing risk formulations, scenario planning, and considering the severity and imminence of violence (Bonta & Andrews, 2016). The Youth Level of Service/Case Management Inventory (YLS/CMI; Hoge & Andrews, 2011) and SAVRY are two of the most widely used third and fourth-generation risk assessment tools for adolescents (Viljoen et al., 2017).

While the early advancement of the risk assessment process focused almost exclusively on adult populations, there has been a substantial expansion of literature on youth violence risk assessment since the early 2000s (Viljoen et al., 2012). Although the youth and adult violence risk assessment literatures are closely intertwined, assessments with young people increasingly prioritise a focus on dynamic change and strength/protective factors (Viljoen et al., 2012, 2020). This has coincided with the increasing research in the field of developmental neuroscience showing young people's behaviour, personality, and cognition are highly variable throughout adolescence and into young adulthood, indicating significant opportunities for intervention and risk mitigation (Giedd et al., 1999; Steinberg, 2008; Sentencing Advisory Council, 2012; Viljoen et al., 2012).

3.2. The Importance of Developmentally Informed Risk Assessments When Working with Young People

The process of development is essential to consider when examining risk among children and youth. Although born out of the adult literature, the field of youth risk assessment can be conceptualised as incorporating three key premises which distinguish it from the adult field (Viljoen et al., 2012).

First, clinicians and researchers working in the area of youth risk assessment recognise that young people are in a continual state of developmental flux, and some have aptly described this cohort as "moving targets" (Borum, 2000, p. 1275). The developmental changes experienced by young people throughout childhood, adolescence and early adulthood mean risk assessment protocols must be sensitive to such changes, as well as recognise that the changing saliency of risk and protective factors (van der Put et al., 2011, 2012), and variations in the types and patterns of offending behaviour (e.g. group-based offending, interpersonal violence; Borum, 2000).

Neuroscience has assisted clinicians and scholars to recognise that adolescence and young adulthood is marked by rapid brain development, particularly for higher-order executive functioning processes (Giedd et al., 1999; Steinberg, 2008). These have been implicated in the higher levels of impulsivity, poorer consequential decision-making capacity, and greater susceptibility to peer influence demonstrated by young people (Steinberg, 2008; Steinberg & Cauffman, 1996; Steinberg & Monahan, 2007). Such developmentally normative deficits are frequently exacerbated within young people who come into contact with the justice system given their tendency to have experienced higher rates of abuse and neglect (Sentencing Advisory Council, 2012), resulting in further impairments to executive functioning capacity, including planning, working memory and attention shifting (Lansing et al., 2016; Perry et al., 2018; Zou et al., 2013). Moving into adulthood, young people develop their executive functioning capacity, improve in their ability to resist negative peer influence, reduce their level of risk-taking, increase their ability to control impulsive tendencies, and develop greater capacity for consequential decision-making (Steinberg, 2008; Steinberg & Cauffman, 1996; Steinberg & Monahan, 2007). These rapid and continual changes highlight that risk assessment for young people often needs to be completed more frequently than for adults and account for the young person's stage of development (Grisso, 2005).

Second, protective factors have been implicated in the risk assessment literature of young people, as well as been introduced into many of the risk tools for this cohort (Viljoen, et al., 2012). While protective factors are a topic of research and consideration within the adult literature, they feature much more prominently for young people. As noted by Viljoen and colleagues (2012), this may be due to the significant quantity of literature on resilience and relevance of protective factors during adolescence, as well as a preference to view young people from a strength-oriented approach in order to avoid the potentially life-long stigma of negative labels (Viljoen et al., 2010). However, there is also an appreciation that developmental fluctuations make young people highly malleable, potentially resulting in an increased capacity for them to experience lasting prosocial change (Viljoen et al., 2012). Recognition of the positive rehabilitative prospects of young people and the strengths-based orientation employed when working with youth, means identification of protective factors and factors related to desistance is an important part of the process when conducting risk assessments for young people.

Third, violence risk assessments for youth have evolved alongside social preference to rehabilitate youth, leading clinicians to emphasise the role of treatment (Viljoen, et al., 2010, 2012). This focus on treatment is once again founded in literature pertaining to youth development, in which young peoples' brains are highly malleable and subject to environmental influence (Sentencing Advisory Council, 2012; Toth & Cicchetti, 1999).

The three features of youth risk assessment described above (see Viljoen et al., 2012 for a more comprehensive review), capture subtle but important distinctions in the risk assessment of young people compared to adults. Assessment of a young person's risk of offending and recidivism is formed within the context of neurological and psychosocial development. Failure to consider risk through this developmental lens would lead to an incomplete assessment of a young person's risk of reoffending (Borum, 2000), as well as

other negative consequences, including the potential for more punitive intervention, the provision of lifelong stigmatising labels, and a lack of age- and developmentally-appropriate intervention tailored to the young person's risks and needs.

3.3. Connecting Risk Assessment and Risk Management

Risk assessment is a process by which a young person's likelihood of engaging in further violence can be determined and such risk can be managed and mitigated (Hoge & Andrews, 2010; Otto & Douglas, 2021). Within Australia, the assessment and management of young people involved with the justice system draws heavily on the Risk-Needs-Responsivity (RNR) framework (Bonta & Andrews, 2016). Risk assessment tools are devised to assist with the collection of information relevant to the RNR principles, however there is evidence to suggest that professionals do not reliably adhere to risk tools and there is inconsistency in how the RNR principles are applied to risk management (Viljoen et al., 2018). Despite these concerns, the terminology of the RNR framework is helpful when attempting to articulate the importance of the risk assessment process for young people who use family violence.

The RNR model emphasises the need for assessors to (a) determine the likelihood of future offending and recommend higher risk individuals receive more intensive intervention (*risk* principle); (b) identify individuals' criminogenic needs (i.e., dynamic risk factors known to be associated with further offending) which can be addressed through intervention (*need* principle); and (c) adopt cognitive-behavioural/social learning principles and tailor interventions to characteristics of the individual (e.g. age, cognitive ability) which may affect their engagement with interventions (*responsivity* principle; Bonta & Andrews, 2016). Adherence to the RNR framework has found to reduce the risk of future offending behaviour (Andrews, 2012; Andrews & Bonta, 2016).

Using the RNR framework as a guide, it is possible to see how the risk assessment of young people who engage in family violence could be helpful to identify the key risks and

needs associated with the young person's behaviour. The risk assessment process of obtaining and synthesising information pertinent to the commission of family violence helps professionals, including psychologists and law enforcement personnel, to develop a structured formulation of the level of risk a young person may pose to their victim and others, following which individually tailored interventions and management strategies can be employed.

The adult family violence literature similarly provides evidence for the linking of risk assessment and management. The Spousal Assault Risk Assessment Guide (SARA; Kropp et al., 1994, 2015) is a structured professional judgement risk assessment and management tool which was developed for use by police officers responding to adult intimate partner violence. Belfrage and colleagues (2011) found that SARA risk assessments demonstrated predictive validity in relation to the risk management recommendations made by Canadian police, with this risk management mediating the association between risk assessment and intimate partner violence recidivism. The authors found that police officers' ratings of risk were positively associated with the level of intervention that was recommended, suggesting the use of the SARA significantly informed how police managed cases of intimate partner violence (Belfrage et al., 2011).

In their systematic review, Viljoen and colleagues (2018) have similarly examined whether risk assessment tools help to reduce risk of violence and reoffending. The authors found there to be a disconnect between risk assessment and risk management in the real world, with risk assessment instruments being insufficient to ensure appropriate implementation of risk management practices or decreases in violence. In most cases, the ultimate purpose of risk assessment tools is not only to predict an individual's likelihood of engaging in future violence, but also to inform how best to manage the individual and prevent a violent outcome in future.

Viljoen and colleagues (2018) found only limited adherence to the need principle, and moderate adherence to the risk principle, in their examination of risk management approaches. This means that criminogenic needs often remain unaddressed (despite the implementation of risk management strategies), not necessarily because risk assessment tools failed to identify these needs, but potentially because professionals are not tailoring approaches according to the RNR principles (Viljoen et al., 2018). While risk assessment represents an important first step in the risk management process, it is insufficient as a standalone strategy and inadequate to prevent future violence when professionals use this information without adherence to the principles of the RNR model (Viljoen et al., 2018, 2020; Viljoen & Vincent, 2020).

3.4. Risk Assessment for Young People Who Use Family Violence

3.4.1. Risk and Recidivism of Young People who Use Family Violence: What We Know

There is a limited body of literature examining risk of family violence recidivism among young people who engage in family violence behaviour. Prevalence estimates of family violence recidivism vary according to follow-up time, with six-month recidivism rates for adolescents (aged under 18 years) ranging from 20.8% (Spivak et al., 2021) to 26% (Boxall & Morgan, 2020), a five-year follow-up showed 52.0% of young people were reported to police for using family violence again (Phillips & McGuinness, 2020).

The small number of studies which have examined family violence recidivism among young people have identified a range of factors associated with a heightened risk of recidivism. Australian research using police administrative data shows family violence recidivism risk (Boxall et al., 2020 utilised a 6-month follow-up period, while Phillips & McGuinness, 2020 used a 5-year follow-up period) is elevated among young people with a prior history of violence (including offences involving the breach of a restraining order

breach offences; Boxall & Morgan, 2020), those with substance use issues (Phillips & McGuinness, 2020), past exposure to family violence (Phillips & McGuinness, 2020), and mental health issues (Phillips & McGuinness, 2020). Young people from rural/regional areas were significantly more likely to engage in family violence recidivism than metropolitan young people (Phillips & McGuinness, 2020), as were males (Phillips & McGuinness, 2020), and young people who engaged in child-to-parent abuse at the index incident (Phillips & McGuinness, 2020). Those who engaged in intimate partner abuse were not found to be at a higher risk of recidivism than young people who engaged in other forms of family violence (Phillips & McGuinness, 2020).

Young people who engage in family violence as an adolescent (aged 12-18 years) are at significantly greater risk of engaging in family violence as an adult, and to do so more quickly, than young people who offended outside the family context as an adolescent (Boxall et al., 2021). Boxall and colleagues (2021) analysed the offending patterns of 8,465 young offenders (aged 13-17) until the age of 23 years. Seven percent (n = 571) of these young people were charged with at least one family violence offence before they turned 18 years old. They found that, although those who engaged in family violence as an adolescent only comprised seven percent of the total sample of young offenders, they accounted for 33% of all family violence offences recorded against the sample in young adulthood (i.e. at age 23 years; Boxall et al., 2021). Therefore, although only a small proportion of adolescents who offend do so against a family member, they are at significantly higher risk of engaging in family violence as a young adult (age 23 years) compared with non-family offenders (Boxall et al., 2021).

3.4.2. Risk Assessment Tools for use with Young People Who Use Family Violence

The developing literature regarding recidivism risk among young people who use family violence is promising, however there is a need for greater application of this

knowledge to the processes of risk assessment and management. Shaffer and colleagues (2022) examined recidivism among 156 Canadian adolescents (aged 12-18 years) who engaged in intimate partner abuse using as the YLS/CMI (Hoge & Andrews, 2006; Hoge & Andrews, 2011) and SAVRY (Borum, 2002; Borum et al., 2006). The predictive validity of the Psychopathy Checklist: Youth Version (PCL: YV; Forth et al., 2003) for adolescent intimate partner abuse was also examined, given its frequent use by professionals to assess youth violence risk (Shaffer et al., 2022; Viljoen et al., 2010). The authors found these tools to be non-significantly associated with the likelihood of future intimate partner abuse among adolescents. However, the sample size was small and impacted by a low base rate of youth intimate partner abuse (11.5%) which may have reduced statistical power and prevented the identification of a positive effect. There has been some suggestion that the SARA (Kropp & Hart, 2015; Kropp et al., 1994) and the B-SAFER (Kropp et al., 2005) may be of potential utility for evaluating adolescents who engage in intimate partner abuse (Bowen & Walker, 2015; Kropp & Hart, 2016; Shaffer-McCuish, 2020), however additional validation is required.

The Child-to-Parent Violence Risk assessment tool (CPVR) has similarly attempted to examine risk among young people who use family violence (Loinaz & de Sousa, 2019), though with a specific focus on child-to-parent abuse. The definition of risk being used to validate the CPVR as a risk assessment tool is not overly clear other than it being noted that positive predictive value (PPV) "permits an answer to the following question: when a case is labelled as high risk, what is the probability that this case will be treated within a judicial context or will include injuries to the mother?". Loinaz and de Sousa (2019) examined CPVR risk and protective factor profiles among clinical (n = 61) and judicial (n = 30) young people, finding that the CVPR tool effectively discriminated between young people who did and did not engage in different forms of child-to-parent violence (AUC = .83), and discriminated

between cases with and without resultant injuries to the mother (AUC = .76), however validation studies are limited. Similarly, while the authors identify the CPVR as a risk assessment tool, it has only been used to classify young people already known to have engaged in child-to-parent violence and retrospectively discriminate the presence of maternal injury (Loinaz & de Sousa, 2019) rather than looking prospectively at future outcomes. At present there is no evidence that the CPVR may effectively assesses 'risk', as such, as the purpose of risk assessment is prediction or discrimination that is future-focused (Otto & Douglas, 2021).

The limitations identified for the CPVR are also applicable to a recent study conducted by Cuervo & Palanques (2022) in their examination of the YLS/CMI for Spanish adolescents (aged 14-17 years) who engage in child-to-parent abuse. While the authors found the Family circumstances, Substance abuse, and Personality subscales of the YLS/CMI to be predictive of child-to-parent abuse among justice-involved youth, results must be interpreted with caution as they are based on a sample of youth already known to have engaged in childto-parent abuse rather than a prospective analysis of youth outcomes.

Additional research building on that of Shaffer et al., (2022) and Loinaz and de Sousa (2019) is needed to improve risk assessment and management of youth family violence. Both studies are limited by small sample sizes and focus on a single relationship of abuse (i.e. intimate partner abuse, child-to-parent abuse), thereby failing to recognise and consider the interconnectedness of different forms of violence (Farrington & Ttofi, 2021; Hamby & Grych, 2013). Similarly, youth family violence is increasingly recognised as often forming part of a broader pattern of antisocial behaviour (Moulds et al., 2019), with burgeoning research indicating young people may engage in abuse toward multiple family members (Boxall & Sabol, 2021). There is therefore a need to consider multiple relationships of abuse

concurrently to assist police and other services with effectively responding to this phenomenon.

3.5. Assessment of Family Violence Risk by Police

Police are the frontline responders to incidents of family violence. There is an increasing emphasis on the use of risk assessment tools by police when responding to family violence, though the evidence base supporting such tools is not always strong (Spivak et al., 2021). The application of risk assessment in the policing context assists with the allocation of limited resources, provides justification for decisions made by officers, and allows for more effective communication between different police units, as well as between police and other services, such as child protective services or community-based services (Kebbell, 2019).

When validated risk assessment tools are employed by police, they are often actuarial in nature and assist with triaging risk for future family violence events (Belfrage et al., 2011; McEwan et al., 2019; Spivak et al., 2021; Jolliffe Simpson et al., 2021). Only three tools for assessing the risk of future family violence have been validated for youth, which is likely due to the focus of most tools being on adult intimate partner violence (Jolliffe Simpson et al., 2021; Spivak et al., 2021; Williams, 2012). Across the board, risk assessment tools for family and/or intimate partner violence that are suitable for use by police (see Spivak et al., 2021 for discussion) were developed and validated for adults. Some have been tested among young people, though simply by grouping all young people under 18 years together (Jolliffe Simpson et al., 2021; McEwan et al., 2019; Spivak et al., 2021), rather than examining the discriminative and predictive capacity of the tools across age, sex, and relationship of abuse.

In addition to triaging risk, such tools are intended to assist police in identifying the most appropriate level of intervention and risk management required from responding police, including whether to arrest or remove the offender from the home, relocate the victims, or impose a restraining order (Medina-Ariza et al., 2016). However, as previously mentioned,

risk assessment does not necessarily translate to adequate risk management (Viljoen et al., 2018), indicating the need for research to focus on the implementation of effective risk mitigation by police following risk assessment (Medina-Ariza et al., 2016). The research linking risk management to risk mitigation by law enforcement agencies remains significantly under-developed (Medina-Ariza et al., 2016), so the following sections will largely focus on the validity of international and Australian risk assessment tools, rather than broadening the discussion to risk management.

3.5.1. International Family Violence Risk Assessments Suitable for Police Use

Reflecting the focus on intimate partner violence risk assessment tools in the broader family violence literature, research examining the validity of such tools for use by police has focused on adult intimate partner abuse (Dutton & Kropp, 2000; Hanson et al., 2007; Nicholls et al., 2013), particularly within heterosexual relationships in which the male is identified as the primary family violence-user. The Ontario Domestic Assault Risk Assessment (ODARA; Hilton et al., 2004) and the Spousal Assault Risk Assessment (SARA; Kropp et al., 1994; Kropp & Hart, 2015) are two of the most studied intimate partner abuse risk assessment tools for adults. Examination of the ODARA in an Australian frontline police setting has shown the tool to perform well in predicting further adult intimate partner physical violence (AUC = .68) as well as in predicting any further police contact for non-physical intimate partner abuse (AUC = .72; Lauria et al., 2017). While the SARA, including the revised SARA-V³ (Kropp & Hart, 2015), is yet to be validated within Australia, it has demonstrated a mean AUC value of .643 among adult samples internationally (van der Put et al., 2019), suggesting moderate discriminative accuracy. The Brief Spousal Assault Form for the Evaluation of Risk (B-SAFER; Kropp et al., 2005; Belfrage & Strand, 2012) is a shorter version of the SARA specifically developed for police use, which has a demonstrated moderate to strong ability to discriminate between adult intimate partner violence recidivists

and non-recidivists (AUC = .63 – .76; Au et al., 2008; Belfrage & Strand, 2012; Loinaz, 2014; McEwan et al., 2017; Storey et al., 2014).

Recently, Jolliffe Simpson and colleagues (2021) evaluated the Dynamic Risk Assessment (DYRA) and the Static Assessment of Family Violence Recidivism (SAFVR), actuarial tools that were developed locally for use by New Zealand Police. Analyses showed the DYRA (a dynamic risk tool) to display poor and non-significant discriminative validity in predicting family violence recidivism (within 24 weeks) for young family violence-users aged under 18 years (AUC = .55, 95% CI [.45-.64], p = .375), while the SAFVR (a static actuarial risk tool) showed moderate discriminative validity (AUC = .63, 95% CI [.53-.73], p = .011). Although both the DYRA and the SAFVR displayed significant discriminative validity (between recidivists and non-recidivists) for use with adults (aged 18 years and over), only the SAFVR was discriminative of recidivists and non-recidivists for adolescents (i.e. aged under 18 years). The confidence intervals were significantly wider for youth, indicating greater prediction error among this cohort, which the authors noted may be due to the smaller size of the youth sample (n = 139; Jolliffe Simpson et al., 2021). Similarly, there was a 63percentage point difference in the sensitivity of the SAFVR for adolescents and adults, with results showing the SAFVR accurately identified 80% of adult recidivists, but only 17% of adolescent recidivists (Jolliffe Simpson et al., 2021). These results may indicate the presence of similar static risk factors for violence among adolescents and adults, but the need for a more developmentally nuanced approach when using dynamic factors to assess risk for future family violence.

3.5.2. Australian Family Violence Risk Assessments

Reflecting the federal structure of Australia's criminal justice system, there is currently no nationwide risk assessment tool – for either adults or youth – used by police to assess family violence risk. Instead, each state police force determines how they will assess family violence risk and which, if any, validated tools are to be used (Richardson & Norris, 2020). This state-level management of family violence risk has resulted in the development of a multitude of screening tools with inclusion of different variables and ultimately differing levels of effectiveness and validation (Richardson & Norris, 2020).

Victoria

Victoria Police Screening Assessment for Family Violence Risk (VP-SAFvR). The VP-SAFvR (McEwan et al., 2019) is an actuarial screening instrument developed in the Australian state of Victoria and was designed to prioritise police reports of family violence on the basis of their probability of future reports to police within the same family. The tool predicts a wide range of police-reported outcomes (reflecting the broad, non-criminal definition of family violence in the jurisdiction). It was developed from a random sample of 24,000 family violence incidents recorded by Victoria Police between July 2013 and June 2014. The remaining family violence incidents in the same year (approximately 20,000) were used to create two cross-validation samples. The VP-SAFvR is composed of 14 risk factors, recorded as absent (score of 0) or present, with a weighted score of 1 or 2 assigned based on the strength of the association between the relevant risk factor and another report to police of family violence within 12 months. A threshold score of four is applied to the tool so that any individual who scores four or above on the VP-SAFvR is referred on to Victoria Police's Family Violence Intervention Unit for specialist review, as they are identified as being at an elevated risk for future family violence. The tool has been tested in field trials where it showed moderate predictive validity (AUC = .66; consistent with the original crossvalidation samples) and was reported as being easy to use by frontline police (Spivak et al., 2021). Discriminative accuracy was reduced for youth (under 18 years) family violence-users (AUC = .61-.62; McEwan et al., 2019; Spivak et al., 2021), however the introduction of a lower cut-off score for referral for further assessment (i.e. threshold score of three rather than

a score of four) proved to be effective for improving predictive accuracy, producing sensitivity and specificity outcomes consistent with those reported for adults over the age of 18 (McEwan et al., 2019). The VP-SAFvR has been in mandatory use for Victoria Police in every family violence incident since July 2019.

Tasmania

Risk Assessment Screening Tool (RAST). The RAST (Julian & Mason, 2009) is an actuarial assessment tool developed by the Tasmanian Police and the Department of Justice. It is used by police within Tasmania to assess the risk of a victim experiencing future family violence following a family violence incident (Julian & Mason, 2009). Risk is assessed as being either low (score of 0-13), medium, or high (28+), with police officers able to employ professional judgement to determine the reliability and accuracy of the provided information (Richardson & Norris, 2020). There has been minimal publicly available analysis of the predictive and discriminative accuracy of the RAST, however available research demonstrates an AUC value of the total risk score to be .60 (95% CI not reported), suggesting a small level of discriminative validity (Julian & Mason, 2009; Rice & Harris, 2005). No research could be found examining the effectiveness of the tool for young people who use family violence.

New South Wales

Domestic Violence Safety Assessment Tool (DVSAT). The DVSAT is a 34-item family violence tool composed of two parts: Part A involves the *Intimate Partner Risk Identification Checklist*, consisting of 25 dichotomous items; while Part B involves *Other Identification/Professional Judgement*, consisting of nine closed- and open-ended questions (Richardson & Norris, 2020; Ringland, 2018). It is used to identify the level of threat of future harm to victims. The DVSAT has been a mandatory risk assessment tool for New South Wales police to employ at each domestic violence incident since July 2015 (Ringland,

2018). Victims are assessed to be at serious risk/threat if: there are 12 or more 'yes' answers in Part A, police used professional judgement to determine the victim is at serious risk, and/or they meet the NSW Police Force criteria for repeat intimate partner victimisation (Ringland, 2018). The DVSAT displayed poor discriminative validity in its assessment of repeat victimisation for both male (AUC = .59, 95% CI = .35) and female (AUC = .58, 95% CI +/-.17) victims (Ringland, 2018). Although young people aged 16-24 years made up more than one fifth of the sample (n = 4074; 21.7%) upon which the tool was tested, there were no agespecific analyses which examined the tools effectiveness specifically for youth.

Australian Capital Territory

Family Violence Risk Assessment Tool (FVRAT). The FVRAT is a 37-item instrument employed by police within the Australian Capital Territory (ACT) to guide their response to situations of violence perpetrated by a current or former intimate partner (Dowling & Morgan, 2019). The overall likelihood of domestic violence-related recidivism is rated as low (0-13), medium (14-27) and high (28+), with officers able to adjust risk level based on their professional judgement. Analysis of the FVRAT indicates it is not a strong predictor of repeat instances of domestic violence (AUC = .60, 95% CI = .49 - .69; Dowling & Morgan, 2019). No research could be found examining the effectiveness of the tool for young people who use family violence.

Northern Territory, Queensland, South Australia, and Western Australia

Police in the Northern Territory and Western Australia use derivatives of the Common Risk Assessment Framework (Richardson & Norris, 2020). The Common Risk Assessment Framework (CRAF) was originally developed in Victoria and implemented in 2007. It is not a risk assessment tool per se, but a framework intended to build a shared understanding of, and responsibility for, identifying, assessing, and managing family violence risk (McCulloch et al., 2016). It consists of a list of risk factors for future physical or lethal

intimate partner violence drawn from the intimate partner violence risk assessment literature. It is intended to be used to inform judgements about which family violence cases present an increased risk of severe outcomes and has recently been revised and updated as the Multi-Agency Risk Assessment Model (MARAM) in Victoria (Family Safety Victoria, 2018). While it is intended to inform risk judgements that guide risk management and intervention, there is no published research examining the empirical validity of decisions made using the CRAF or the MARAM (Richardson & Norris, 2020).

Police in South Australia utilise the rationally derived South Australian Risk Assessment Form (SAPRAF), however research examining its predictive utility could not be located. Queensland Police utilise the Domestic Violence Protective Assessment Framework (DV-PAF), which is comprised of a range of domestic violence-related risk factors (Queensland Police, 2021). There is no available research which has validated the DV-PAF for either adults or youth.

3.6. Summary

Currently, risk assessment instruments predicting risk of future police-reported family violence have only been validated for use with young people by grouping all young people under 18 years together as a homogenous group (Jolliffe Simpson, 2021; McEwan et al., 2019; Spivak et al., 2021), rather than recognising the significant heterogeneity that exists in this cohort. Validation studies are yet to examine the utility of these tools across sex, age, or relationship of abuse. Similarly, while there have been attempts to develop or validate risk tools for use with young people who engage in family violence external to the police context, these have been limited by small sample sizes (Shaffer et al., 2022), lack of appropriate validation (Loinaz & de Sousa, 2019; Shaffer et al., 2022), and focus on a single relationship of abuse (Bowen & Walker, 2015; Loinaz & de Sousa, 2019; Shaffer et al., 2022). Such

limitations have impeded the capacity of police and clinicians to effectively identify and manage risk of future family violence.

3.7.The Relevance of Situational Factors to Family Violence Outcomes: A Theoretical Examination

The importance of situational factors to the assessment of family violence risk has been recognised for decades (Dobash & Dobash, 1998; Felson & Steadman, 1983; Sampson & Lauritsen, 1994; Wilkinson & Hamerschlag, 2005), yet it has been the topic of little empirical attention compared to individual (e.g. substance abuse, cognition, mental health) and macrosystem (e.g. poverty, ethnicity) factors. The lack of focus on situational factors in the family violence field is somewhat surprising given violence between family members invariably occurs within the context of an ongoing relationship in which there is often a significant amount of time in which violent or abusive behaviour does not occur. It is the highly changeable situational factors (e.g., intoxication, argument between the family violence-user and victim, presence of a third party) that are particularly relevant to *when* violence is most likely to occur (Vagi, 2013), making it important to identify such factors when assessing and managing risk of family violence, as well as for informing treatment.

One possible reason for the neglect of the situational elements of violence may relate to the tendency for the psychological literature to heavily rely on the desire to understand the individual person and to group people and behaviours into distinct categories, rather than attempt to formulate individualistic explanations for behaviour (Haig, 2014; Ward et al., 2006; Ward & Beech, 2015). This section will explore how different theories conceptualise situational factors as part of the initiation and maintenance of aggressive and violent behaviour, including family violence. A summary of such factors, drawn from the available literature, are summarised in Table 1.

3.7.1. General Aggression Model

The General Aggression Model (GAM; Anderson & Bushman, 2002) is a comprehensive framework which draws on a multitude of smaller theories to create a unified theory of aggression (Anderson & Bushman, 2002). It suggests that cognition, affect and arousal mediate the effects of individual and situational variables of aggression, with each aggressive event composed of three key stages: (a) person and situational inputs; (b) cognitive, affective, and arousal routes mediating these inputs; and (c) outcomes of the appraisal and decision-making process (Anderson & Bushman, 2002).

'Situational factors' are defined by Anderson & Bushman (2002) to include "any important features of the situation" (p. 37), including aggressive cues (e.g. presence of guns or other weapons, exposure to violent television or video games), provocation (interpersonal verbal and/or physical aggression, perceived injustice), frustration (interference with goal attainment, displaced aggression), pain and discomfort (hot temperatures, loud noises, unpleasant odours, pain), drugs (alcohol, illicit substances, caffeine), and incentives (money, power). However, Anderson and Bushman (2002) note that this list of factors is not exhaustive, and that additional research is needed on the topic. The conceptualisation of situational factors as "key casual factors" (Anderson & Bushman, 2002, p. 35) of violence supports their centrality in our understanding of violent outcomes. However, the focus of empirical research using the GAM has frequently favoured the examination of cognitive, affective and arousal states (stage 2), and individual factors, rather than integrating these features to generate a comprehensive understanding of aggression and violence.

There is limited peer-reviewed research contextualising youth family violence according to the general aggression model. However, of the research that is available (Daff et al., 2019, 2020; Simmons et al., 2022), much of it has focused on intimate partner abuse. Similarly, there remains limited examination of situational factors within these studies,

resulting in a lack of understanding as to how situational factors influence abusive behaviour among young family violence-users. The limited research linking one of the most prominent theories of aggression to youth family violence is representative of the lack of theory development in this literature

3.7.2. I^3 Theory

The I³ Theory (Finkel, 2014; Slotter & Finkel, 2011) is an integrative metatheory of behaviour suggesting factors can either encourage (*Impel*) or obstruct (*Inhibit*) a behaviour from occurring. The I³ theory identifies the interaction between those impelling and inhibiting factors to be relevant to the prediction of aggressive and/or violent behaviour.

The I³ theory has a different emphasis from the GAM, in that it highlights the role of self-regulatory processes and emphasises which risk factors interact to produce aggressive behaviour in an otherwise non-aggressive interaction (Slotter & Finkel, 2011). The theory identifies three key sets of factors which interact to produce an outcome: instigating triggers, impelling forces, and inhibitory processes. Instigating triggers are defined as "discrete situational events or circumstances that induce rudimentary action toward physical aggression" (p. 37) and can fall into one of two categories: dyadic triggers (originating within the target) and third-party triggers (originating in someone other than the target; Slotter & Finkel, 2011). The second category, impelling forces, refer to those factors which increase the likelihood of an individual becoming aggressive, while inhibiting forces are those factors which decrease the likelihood of aggression (Slotter & Finkel, 2011).

The application of the I³ theory to intimate partner abuse (Daff, 2019; Finkel, 2007; Finkel et al., 2012) and general aggression (Finkel & Hall, 2018; Slotter & Finkel, 2011) has resulted in the identification of a range of situational variables which may influence violent outcomes. These have been summarised in Table 1. Authors of the I³ theory clearly articulate that aggressive and violent outcomes fail to eventuate without triggering events and impelling

variables, several of which are situational (Finkel & Hall, 2018; Slotter & Finkel, 2011). Failure to consider such mechanisms provides an incomplete picture of violence and an insufficient understanding of the risk an individual may pose, as risk is an inherently contextual phenomenon (Hart et al., 2003).

3.7.3. Ecological Frameworks

As previously discussed in section 2.2.3, Bronfenbrenner's (1979) Social Ecological Model and Dutton's (1995) Nested Ecological Model adopt a sociological explanation of society, using four key levels. The broadest level, the Macrosystem, involves factors operating at the societal level (e.g. culture). The Exosystem, the next level down, considers community-level factors (e.g. education, neighbourhood). The Microsystem refers to immediate relationships, including family and peers, and the Ontogenic level considers individual factors (e.g. mental health, cognition). While all ecological levels have been explored in the context of family violence, there is less examination of the interactionist effects between these levels, and how the situation may impact aggressive or violent outcomes. For example, the ontogenic factors of poor mental health and substance misuse may place stress upon family relationships (microsystem) which receive little community or professional support (exosystem), resulting in verbal conflict regarding a person's substance misuse (trigger), which may result in a physical altercation (violent outcome). Developing an understanding of the possible interactions between factors helps to provide an understanding of how a single variable within a given ecological level may not result in aggression or violence, but that interactions between multiple variables may result in violence. Similarly, gaining an understanding of the situational factors related to violence may help to elucidate why individuals may be aggressive or violent in some situations and not others, thereby supporting examination of within-individual variation (Willits, 2015).

The ecological framework has also been adapted to the study of gender-based violence, providing further support for the examination of situational and contextual variables. Heise's (1998) integrative, ecological framework for gender-based violence integrates feminist and ecological theories to conceptualise violence as a multi-faceted phenomenon resulting from the interaction between personal, situation, and sociocultural factors. Heise (1998) uses the ecological framework provided by ecological theories (Bronfenbrenner, 1979; Dutton, 1995) as a heuristic to organise existing research and draws from findings related to all types of physical and sexual violence perpetrated by men toward women. While family violence by young people is not as gendered as adult-perpetrated family violence (Phillips & McGuinness, 2020; RCFV, 2016), it still displays a gendered pattern and so relevant situational variables may need to be considered using a gender-based lens. Heise (1998) explored situational factors within the microsystem ecological level, suggesting they operate to influence violent outcomes via how individuals relate to those around them.

Table 1.

Situational Factors Identified in the General Aggression Model, Social Information

Processing Theory,	and the I^3	theory
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Theory	Situational Factors		
General Aggression Model	Aggressive cues (e.g. presence of guns or other weapons, exposure to		
(Anderson & Bushman, 2002)	violent television or video games)		
	<i>Provocation</i> (interpersonal verbal and/or physical aggression, perceived injustice)<i>Frustration</i> (interference with goal attainment, displaced aggression)		
	Pain and discomfort (hot temperatures, loud noises, unpleasant odours, pain)		
	Drugs (alcohol, illicit substances, caffeine) Incentives (money,		
	power)		
I ³ Theory (Finkel, 2014; Slotter	Instigating Triggers	Social rejection, physical provocation, verbal	
& Finkel, 2011)		provocation, goal obstruction, opportunity for	
		personal gain	
	Impelling Forces	Environmental irritants (e.g. heat), pain,	
		physiological arousal, blameful attributions,	
		aggression cues, alcohol, ego depletion,	
		presence of a weapon, elevated testosterone	
	Inhibiting Forces	Fear of injury to self, costs>benefits, plentiful	
		cognitive processing time, strong self-control,	
		frontal lobe functioning, strong relationship	
		commitment	
Ecological Frameworks	Ontogenic	Sex, age, mental health, disability, mental	
		health	
	Microsystem	Male dominance and power within the family,	
		relationship conflict, substance misuse,	

3.7.4. Summary

These theories and models suggest the examination of situational factors is integral to the study of violence, however this has not necessarily translated to research, particularly when examining family violence use by young people. Although the influence of many of these factors have been examined in previous research relating to general violence (Ezell, 2021; Lindsay & Anderson, 2000; Wilkinson, 2011), and even to family violence within adults (Dobash & Dobash, 1998; Wilkinson & Hamerschlag, 2005; Yetter, 2015), there has been poor conceptualisation of the relevance of situational factors for young people who engage in family violence. Further exploration of situational variables is needed to determine how these relate to youth family violence and how they may be used to improve risk assessment and management of this cohort (Simmons et al., 2018).

3.8. Current Use of Situational Factors in the Risk Assessment Process: An Adult Risk Assessment Perspective

The field of risk assessment historically focused heavily on the prediction of violence, rather than conceptualising it as the first step in a process of risk management, resulting in a greater focus on static rather than dynamic and situational variables (Lloyd, 2015). However, over the course of development of the four generations of risk assessment tools, there has been an increasing recognition of the importance of dynamic factors in risk assessment, risk management, and intervention with offenders.

In addition to their role in risk prediction, third and fourth generation risk assessment tools encourage clinicians to consider situational factors through the use of scenario planning (Hart et al., 2016; Johnstone & Logan, 2012) and, more broadly, risk formulation (Hart & Logan, 2011; Johnstone & Logan, 2012). Commonly used risk tools such as the Historical Clinical Risk Management (HCR-20; Douglas et al., 2013), Spousal Assault Risk Assessment (SARA; Kropp & Hart, 2015), Brief Spousal Assault Form for the Evaluation of Risk (B-

SAFER; Kropp et al., 2005, 2010), Domestic Violence Screening Inventory – Revised (DVSI-R; Williams, 2012), and the Risk for Sexual Violence Protocol (RSVP; Hart et al., 2003) ask clinicians to make judgements about the imminence of an individual's risk, however little guidance is provided as to what risk factors relate to imminence. While it makes sense that tools that examine the risk an individual carries into different settings (e.g., tools such as the RSVP, and the ODARA; Hilton et al., 2004, 2010) are less focused on situational factors, those which examine targeted risk of violence toward a specific person in the context of an ongoing relationship (e.g., tools such as the VP-SAFvR and the B-SAFER) might benefit from a greater focus on situational antecedents of violent behaviour. This is due to the potential for there to be a set of common situational triggers which, if present, could indicate a greater risk of imminent violence.

Examination of the broader risk literature, particularly the literature examining violence within institutional settings, suggests it is situational factors which best predict the imminence of future violence (Daffern & Ogloff, 2009; Ogloff & Daffern, 2006; Woods & Almvik, 2002). For example, tools such as the Dynamic Appraisal of Situational Aggression (DASA; Daffern & Ogloff, 2009; Ogloff & Daffern, 2006) and the Broset Violence Checklist (BVC; Woods & Almvik, 2002), include situational risk factors like 'irritability', 'sensitivity to perceived provocation', and 'easily angered when requests are denied'. This focus on the situational characteristics of violent events is representative of the importance of highly dynamic factors in predicting imminent aggression within inpatient settings, whereas validation of family violence risk assessment tools examine the predictive capacity of tools using longer timeframes (e.g. 6 months, 5 years; Hilton & Harris, 2009; McEwan et al., 2019; Williams, 2012).

Similarly, while scenario planning forms an important part of many third and fourth generation risk assessment protocols, there is little guidance as to what factors might be most

relevant, indicating an area of research need. Scenario planning is the process of imagining plausible future environments in which a given individual may engage in violent behaviour future (Hart et al., 2016). While individual-level factors (e.g., antisocial attitudes, employment issues) have been studied extensively and can provide an indication of who is relatively more or less likely to engage in violence, it is the highly changeable situational factors (e.g., intoxication, provocation) that are particularly relevant to *when* violence is most likely to occur (Vagi, 2013). This makes situational factors particularly relevant for scenario planning and an important addition to any risk management approach. For example, avoidance or abstinence from alcohol and other drugs may be a key risk management strategy for those who are identified as being particularly prone to violence when intoxicated, while skills-based interventions may be relevant for those who become violent in the context of interpersonal communication. Further research identifying the situational antecedents of violent events, and associated risk management approaches, may assist, to some extent, in bridging the disconnect between risk assessment and risk management identified by Viljoen et al. (2018).

3.9. The Role of Situational Factors in Youth Family Violence: A Developmental Perspective

As previously noted, the developmental and life-course explanations of offending suggest the pathways to youth delinquency are multifactorial and influenced by multiple levels of a young person's ecology (Cicchetti & Cannon, 1999; Cicchetti & Lynch, 1993; Moffitt, 1993). The Social Ecological Model proposed by Bronfenbrenner (1979), and Dutton's (2006) Nested Ecological Model similarly promote the importance of factors at multiple levels of the young person's ecology (e.g. individual, school, peers, family, community) in the development of antisocial behaviour, with Dutton (2006) particularly focusing on the relevance of these factors for family violence perpetration.

Utilising developmental and ecological frameworks to understand youth family violence is imperative, as neuropsychological processes are continuing to undergo maturation and can significantly alter the trajectory of a young person's propensity to offend (Cohen et al., 2015; Steinberg, 2017). Neuropsychological immaturity is inherent in youth, with the ongoing nature of development meaning young people present with under-developed executive functioning capacities, increased risk-taking behaviour, and decreased abstract reasoning capabilities, leading to greater reactivity to their environment (Cohen et al., 2015; Steinberg, 2017).

Such immaturity is frequently magnified in delinquent youth. Compared to those who do not offend, research has shown youth offenders to display higher rates of impulsivity and reduced self-control (Beaver et al., 2010; Vila-Ballo et al., 2015), difficulties in switching attention between tasks (Borrani et al., 2019; Vila-Ballo et al., 2015), language impairments (Anderson et al., 2016), reduced cognitive flexibility (Borrani et al., 2019; Pihet et al., 2012), and difficulties with perspective-taking and moral reasoning (Ferriz-Romeral et al., 2018).

The existence of these neuropsychological difficulties among youth who display antisocial behaviour, as well as the inherent immaturity of youth generally, suggest young people experience greater vulnerability to environmental influence and difficulty negotiating situational dynamics. For example, difficulties with attention switching (Borrani et al., 2019; Vila-Ballo et al., 2015) suggests a young person may struggle to appropriately alter their behaviour to environmental changes (e.g. reducing aggressive behaviour in recognition of another's fear response), while reduced cognitive flexibility and self-control (Beaver et al., 2010; Borrani et al., 2019; Vila-Ballo et al., 2015) may lead a young person to become more reactive to mildly upsetting environmental stimuli (e.g. parents prohibiting a young person from attending the party).

However, it is important to remember that even antisocial and aggressive young people do not display problematic behaviours in all settings. Young people may be exclusively aggressive or disruptive in the home environment, or exclusively controlling or abusive with an intimate partner. Therefore, certain aspects of a young person's environment and associated situational variables are likely to be involved in triggering an antisocial response.

The neglect of the situational context in relation to general youth violence, and youth family violence more specifically, is to the detriment of risk assessment, risk management and therapeutic intervention. Integrating developmental, neuropsychological and ecological frameworks demonstrates the need to consider situational variables in the risk assessment and management process of young family violence users.

3.10. Summary of Chapter

In contrast to adult risk assessments, those conducting risk assessments with young people must be cognisant of the impact of developmental change on the saliency of risk factors (van der Put et al., 2011, 2012), the importance of identifying protective factors, and the preference for rehabilitation over punishment of young offenders (Viljoen et al., 2012). These features distinguish youth and adult risk assessments, and are borne out of neuroscientific research highlighting the developmental immaturity of adolescents and young adults (Steinberg, 2008; Steinberg & Monahan, 2007), and their greater capacity for rehabilitation and change (Viljoen et al., 2012).

Despite the need for developmentally-informed and validated risk instruments, and the availability of 39 different intimate partner violence risk assessment tools for use with adults (van der Put et al., 2019), attempts to validate tools for use by police with young people have typically grouped all young family violence-users under 18 years together as a homogenous group (Jolliffe Simpson, 2021; McEwan et al., 2019; Spivak et al., 2021), rather

than recognise the inherent heterogeneity of youth. Attempts to develop other risk assessments external to the police context are similarly limited by the use of small sample sizes (Shaffer et al., 2020), lack of appropriate validation (Loinaz & de Sousa, 2019), and a focus on a single relationship of abuse (Bowen & Walker, 2015; Loinaz & de Sousa, 2019; Shaffer et al., 2020).

Additionally, there is a lack of literature on the specific situations which may increase a young person's risk of violence or family violence. There is currently an adequate level of understanding as to who is at risk of engaging in youth family violence, but a distinct lack of knowledge as to when this will occur, indicating a need for research about situational factors that could be used to inform risk assessment or risk formulation. This will assist in the development of tailored risk management and intervention approaches for young people who engage in family violence.

PART II: METHODOLOGY Chapter Four: Methods

4.1. Overview

Chapter four provides an outline of the research design and statistical analyses employed in this thesis. The four papers (Chapter Five, Six, Seven, and Eight) contain a detailed description of the methodology used for each study, however an outline of the overall research design, data collection procedure, data entry and data analyses employed is provided here. The data analysis section identifies and separates those papers which employ purely quantitative analyses (Chapters Five, Six, and Seven) from that which employed content analysis (Chapter Eight) to provide clarity for the reader.

4.2. Data Source and Extraction

All data used within the present thesis has been drawn from family violence reports located on Victoria Police's Law Enforcement Assistance Program (LEAP), which is used by Victoria Police to record all known offences and police involvements (family violence- and non-family violence-related) for an individual, regardless of outcome (e.g. arrested, charged, convicted). This is an electronic program, and all information obtained LEAP for the present thesis was extracted electronically by Victoria Police provided to researchers in multiple excel spreadsheets. All data was provided to researchers in non-identifiable form using unique police identifiers which linked information pertaining to young family violence-users and victims across incidents.

In addition to information from each family violence report, data pertaining to historical family violence incidents, as well as family violence recidivism over a 6-month follow-up period, were extracted by Victoria Police and provided to researchers. This included information relating to an individual's history of victimisation (e.g., age at first police-reported family violence victimisation, number of times the individual was recorded as

a victim, relationships in which they were victimised), historical use of family violence (e.g., age at which an individual was first reported to police for using family violence, number of times they had been reported to police, types of family violence used), follow-up victimisation experiences (e.g., number of times the individual was victimised in subsequent six months, types of relationships they were victimised in) and use of family violence (e.g., number and types of family violence incidents individual was involved in) by the index family violence-user.

4.2.1. Family Violence Reports

Whenever Victoria Police members respond to an incident of family violence, they complete a family violence report. Each family violence report is used to record characteristics of the incident, the victim, the person using family violence, and their relationship. Demographic characteristics (e.g. age, sex, presence of a disability) for both the victim and the family violence user are also recorded, as well as 39 separate risk factors associated with future or lethal family violence incidents (McEwan et al., 2019).

4.2.1.1 The Victoria Police Screening Assessment of Family Violence Risk (VP-SAFvR)

The items of the VP-SAFvR comprise 14 of the 39 risk factors contained in the family violence report, with police officers rating each of the VP-SAFvR items as either absent (score of zero) or present (weighted score of either one or two). The highest possible score an individual can receive on the VP-SAFvR is 16. A score of four or above means the case is screened in for further examination by specialist police officers. The information used to score the VP-SAFvR is based on information collected at the index incident (i.e., from victims, family violence-users, third parties, and police observations) and from information on the LEAP database (e.g., whether the family violence user has ever breached a court order

or engaged in violent offences previously). The items of the VP-SAFvR are presented in Table 2 of the second paper of this thesis.

4.2.1.2. Police Narratives

As part of the family violence report, responding officers are required to write a narrative of the abusive event based on information provided by the victim, the family violence-user, and any available third parties. No formal structure is prescribed for responding police officers when completing a narrative of a family violence event, which can lead to substantial variability in the recording of information across narratives.

Police narratives were extracted separately from other data contained within family violence reports. They were linked to the other family violence report data using unique police identifiers. Data extraction of police narratives was completed by Victoria Police staff and provided to researchers in excel spreadsheets in non-identifiable form.

4.3. Family Violence Recidivism

Data pertaining to family violence recidivism was obtained from family violence reports in the six months following the index family violence incident and which were located on LEAP. This data was extracted by Victoria Police staff and provided to researchers in non-identifiable form using unique police identifiers.

4.3. Research Design and Sample

The thesis used a pseudo-prospective follow-up design to analyse all police-reported incidents of family violence (including multiple incidents involving the same young family violence-user) in the Australian state of Victoria, during the four-month period between 1 September and 31 December 2019 (index period), in which a young person (aged 10-24 years) was listed as the primary family violence-user (N = 5014). The sample was drawn from all 24,419 family violence incidents recorded by police during the same period, except for 358 (1.50%) that were missing respondent age and so were excluded.

The index incident data obtained from family violence reports for each young family violence-user was linked with historical data held in police databases and family violence recidivism data collected over a six-month follow-up period. Family violence recidivism was coded as present if the young person was reported to police again for using family violence (toward either the same or a different victim) in the 6 months following the index incident. The linking of index incident data with historical and follow-up information was achieved using unique police identifiers assigned to the young family violence-user and the victim at the time of the index family violence incident.

In addition to this information, a total of 500 police narratives of family violence reports were extracted by Victoria Police, 245 of which involved young people (aged 10-24 years; 250 narratives were requested however researchers only received 245) who used family violence and 250 involving adults (aged 25 years and older) who used family violence. These narratives were randomly selected from the broader population cohort (N = 24,419) of police-reported family violence incidents described above. Only the narratives involving young people were considered for analysis in the present thesis.

Victoria Police are the sole policing agency for the Australian state of Victoria (population 6.63 million at the time of the study; 66.99% of whom live in the state's capital city of Melbourne and 18.6% who are aged 10-24 years, Australian Bureau of Statistics, 2021) and record all incidents of family violence as a matter of policy, regardless of whether charges were laid. Yet, it is important to note that not all forms of family violence constitute a criminal offence in Victoria (e.g. there are no specific charges associated with emotional abuse). Only half (N = 47468, 50.8%) of all family violence incidents in Victoria between July 2020 and June 2021 involved a criminal offence for which charges were laid.

4.2. Ethical and Organisational Clearances

Ethical approval and oversight for the research contained within this thesis was provided by the Swinburne University Human Research Ethics Committee (SUHREC; November 30 2020, reference: 20204231-5617) and the Victoria Police Research Coordinating Committee (Project 968). A copy of the SUHREC and Victoria Police approvals can be found in Appendix II.

4.3.Data Preparation

4.4.1. Quantitative Data

Quantitative data obtained from family violence reports were the sole data source used in the first three papers (Chapters Five to Seven) and were used alongside qualitative data (to provide descriptive information) in the fourth study (Chapter Eight). Data cleaning was conducted by Dr Benjamin Spivak using R (R Core Team, 2019) as part of the data preparation process for the broader dataset (N = 24,419). Demographic, count- and timebased variables were created by Dr Benjamin Spivak, with additional variables created in consultation with the first author of the present thesis.

Count variables for both victims and family violence-users were created to represent the total number of a given event historically (i.e. number of family violence incidents prior to the index period), across their lifetime (i.e. number of family violence incidents found by combining the number of historical incidents and the index incident), and during the sixmonth follow-up period (i.e. number of family violence incidents that occurred after the index incident). Time-based variables were also created to represent the number of days between the index incident and the most recent occurrence of a given historical event for each victim and young person (i.e. number of days until the young person was involved in another family violence incident). These count- and time-based variables were then used in analyses or were recoded into other useable forms (e.g. binary variables). Once data cleaning had

occurred and variables were created, the dataset was then exported to a comma separated values (CSV) file and subsequently imported to IBM SPSS (Version 28), following which statistical analyses were conducted.

4.4.2. Qualitative Data

The qualitative component of this thesis involved content analysis using an inductive thematic analysis of police narratives. This formed the basis of the fourth paper (Chapter Eight). Preparation of police narratives was conducted by the author of this thesis (A.S.). Victoria Police provided the narratives electronically in eight separate excel spreadsheets. A.S. first separated the adult (n = 250) and youth (n = 245) narratives. The adult narratives were not further examined or utilised as part of the present thesis. Youth narratives were transferred to a password-protected Microsoft Word document and NVivo Software to allow for content analysis to be conducted using a combination of manual and NVivo-supported coding.

To ensure the thesis could be completed within the requisite timeframe, it was decided that only a single relationship of abuse (i.e. child-to-parent abuse; n = 104, 41.11%) would be examined. All narratives involving a form of family violence other than child-to-parent abuse (n = 149, 58.89%) were excluded from further analysis. Of the 104 child-to-parent abuse narratives, 22 were removed from further analysis. This was due to a variety of reasons, including: there being repeat narratives for the same incident (n = 2), the narrative was not provided to researchers (n = 5), large sections of the narrative were missing (which likely occurred when narratives were exported across to excel spreadsheets; n = 10) both the family violence-user and victim refused to provide information regarding the abusive event to police reasons (n = 1), the narrative was incorrectly identified as child-to-parent abuse (n = 2), the victim and family violence-user were missidentified multiple times throughout narrative (n = 1), and the event was listed as a breach-only event, with no other information provided (n = 1).

1). A total of 82 narratives of child-to-parent abuse were available for analysis in the fourth study by the end of this process.

4.5. Data Analysis

The first three papers (Chapter Five, Six, and Seven) involved purely quantitative analyses, while the fourth empirical paper employed content analysis. Quantitative data analysis for the present thesis was conducted using IBM SPSS Statistics (Version 28) and R Core Team (2019). The qualitative component of the fourth empirical paper was conducted using a combination of manual coding and NVivo software.

4.5.2. Paper One

The first paper explored the characteristics of young across the key developmental periods of early adolescence (10-14 years), late adolescence (15-19 years), and young adulthood (20-24 years). Data were analysed using IBM SPSS Statistics, version 28 (2020). Descriptive statistics were provided for the sample and by age group. A series of binary logistic regressions with odds ratios as a measure of effect size were used to compare the age groups across sociodemographic, psychosocial, and family violence-related characteristics, with a Bonferroni-Holm correction applied to control for Type I error. Dummy variables were created where necessary. For example, when determining whether child-to-parent abuse was more common among early adolescent or adult family violence-users, child-to-parent abuse was coded as 1 and all other relationship dyads were coded as 0.

Additional analyses comparing the rate of family violence per 100,000 people according to the young person's age were also conducted. The rate per 100,000 was established for those aged 10-14 years (metropolitan rate: 7.55; rural/regional rate: 13.57), 15-19 years (metropolitan rate: 23.69; rural/regional rate: 43.50) and 20-24 years (metropolitan rate: 32.64; rural/regional rate: 57.00) at the index incident. These were calculated using the populations of Victorian metropolitan (5,229,920 people) and regional

(1,466,750 people) areas provided by the Australian Bureau of Statistics for the year 2020 (ABS, 2021).

A Kaplan-Meier survival curve was employed to compare the time to family violence recidivism among early adolescent, late adolescent, and young adult family violence-users. Survival distributions across the three age groups were compared using a log rank test.

4.5.3. Paper Two

The predictive validity of the VP-SAFvR for use with young people (aged 10-24 years) was examined using area under the curve (AUC) and associated test statistics (sensitivity, specificity, positive predictive value (PPV) and negative predictive value (NPV)). Additional analyses examining the efficacy of the VP-SAFvR according to sex, age bracket (i.e. 10-14 years, 15-19 years, 20-24 years), and relationship of abuse (i.e. child-to-parent abuse, intimate partner abuse, sibling abuse) for young people was also conducted. The VP-SAFvR score is the summed total of the 14 VP-SAFvR items scored by responding police officers during a family violence incident.

The analyses were run separately for both same-dyad recidivism (i.e. the young family violence-user was only abusive toward the same victim as at the index incident) and any-dyad recidivism (i.e. the young family violence-user was abusive toward either the same victim as at the index incident, or a different victim). Both sets of analyses were run in the present thesis as the VP-SAFvR has been validated for use with same-dyad recidivism, however had not yet been validated for any-dyad recidivism, which is important given a significant minority of young people are abusive across more than one type of relationship (Boxall & Sabol, 2021; Kuay et al., 2016). The results for same-dyad recidivism are presented in the second paper (Chapter Six), while the results for any-dyad recidivism are provided as supplemental material in Appendix III.

4.5.4. Paper Three

The third paper examined the differences in risk and need between young people who had only ever come to police attention for using family violence (i.e., family-only youth) with those who had come to police attention for both family violence and other offending behaviour (i.e., generalist youth). Descriptive statistics were calculated using IBM SPSS Statistics, version 28 (2020), while logistic regressions and cox regression were completed using R (R Core Team, 2019). Generalist youth are identified as those who had come to police attention for engaging in non-family violence offending behaviour prior to the index family violence incident. Family-only youth are those who have only come to police attention for using family violence.

Binary logistic regression with odds ratios as a measure of effect size were used to compare generalist and family-only cohorts in terms of lifetime history of family violence behaviour, level of need, and recidivism characteristics. Logistic regressions were run with a single predictor variable (i.e. generalist vs family-only), with adjusted odds ratios controlling for age and sex of the young person also provided. Restricted cubic splines were fitted to the age variable to address non-linearity (see empirical paper three (Chapter Seven) for further information regarding restricted cubic splines). Post-hoc analyses were used to examine differences between generalist and family-only youth for individual and index incident variables, with Bonferroni corrections applied to adjust the alpha level.

Two cox proportional hazards models were constructed with significance tests conducted on the log hazard ratios. The first model was used to examine the relationship between being a generalist or family-only youth and time to family violence recidivism (in days). The second model was used to examine the relationship between diversity of prior offending among generalists and time to family violence recidivism.

4.5.5. Paper Four

The fourth study used content analysis to conduct and inductive thematic analysis of police narratives to identify and quantify the occurrence of situational factors among young people (10-24 years) reported to police for using family violence towards a parent (n = 82). Descriptive information about demographics (e.g. age, sex), background characteristics (e.g., victimisation history, mental health issues), and aspects of the index incident (e.g., type of aggression) were also extracted from police records. This descriptive information was used to gauge sample representativeness and to allow for comparison with existing research.

Police narratives were initially analysed through multiple readings by the lead author and doctoral student (A.S.) and were read line-by-line to identify and label individual meaning units. Once themes and subthemes were finalised, A.S. provided coding training to author M.S. for the purposes of determining inter-rater reliability of situational factors to ensure consistent frequency estimates. M.S. independently coded the situational factors from nine randomly selected narratives at the subtheme level. The presence of subthemes was agreed upon in 70.83% of cases (7 out of a total of 24 subthemes misidentified), while interrater reliability at the theme level was identified as 84.21% (3 out of a total of 19 themes misidentified).

PART III: EMPIRICAL STUDIES Chapter Five: Study One

5.1. Rationale for Study One

This chapter presents the first of four papers in this thesis. Knowledge regarding the use of family violence by young people has been increasing in recent years, yet it remains unclear how the characteristics of youth family violence differ across adolescence and young adulthood. This represents an oversight given the importance of age and developmental stage in the assessment, management, and treatment of violent behaviour (Borum, 2000, 2016; Heilbrun et al., 2020). The first empirical paper aims to provide a descriptive overview of police-reported youth family violence using a population cohort and determine whether agerelated differences exist in relation to key sociodemographic, psychosocial, and family violence-related characteristics of young family violence-users at the index incident. There is a lack of research involving official (rather than self-report) data that uses a developmentally sensitive analytic approach, resulting in the present study providing an informative contribution to the field of youth family violence. The first study addresses the first overarching aim of this thesis, which is to advance understanding of characteristics related to youth family violence at different developmental stages. The developmental periods of interest to the present study were primarily derived from the World Health Organisation (WHO, 2021). The WHO defines 'young people' as those aged 10-24 years and identifies those aged 10-14 years as being in a period of 'early adolescence', while those aged 15-19 years are in a period identified as 'late adolescence' (WHO, 2021). 'Young adulthood' included those aged 20-24 years, consistent with previous literature examining youth FV (Simmons et al., 2020).

The first study, titled '*Characteristics of young people who use family violence in adolescence and young adulthood: an age-based analysis*' was submitted to *Journal of Family Violence* on 22nd June 2022. The paper was returned with a request for 'minor revisions'. At the time of thesis submission, the revisions for the paper are being addressed. The *Journal of Family Violence* is an interdisciplinary peer-reviewed journal that disseminates research focused on addressing all forms of family violence. The current impact factor of *Journal of Family Violence* is 2.18 (Clarivate Analytics, 2020). The 'Author Indication Form' detailing the nature and extent of the candidate and co-authors' contributions to this published study is included in Appendix I.

Characteristics of young people who use family violence in adolescence and young adulthood: an age-based analysis

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We have no conflicts of interest to disclose. This study involves secondary analysis of data from a larger project, as described in the method section. The specific ideas and data analyses presented in this work have not previously been published or presented.

Abstract

There is a lack of research examining age-related differences in the characteristics of young people who use family violence across key developmental periods. This study provides a population-based descriptive overview of young people who come to police attention for using family violence and examines how sociodemographic, psychosocial, and family violence-related characteristics differ across early adolescence (10-14 years), late adolescence (15-19 years) and young adulthood (20-24 years). The sample comprised all youth aged 10-24 years (N = 5014) who were reported to police for using family violence over a four-month period in 2019. A series of logistic regressions with odds ratios as a measure of effect size were undertaken to examine age-related differences in sociodemographic, psychosocial, and family violence-related characteristics across the three age groups. Results suggested that young people who used family violence were typically male and disproportionately from low socioeconomic backgrounds and rural/regional locations. Prevalence of mental health issues and family violence recidivism were consistent across all age groups. Substance abuse and unemployment/school truancy were higher among those in late adolescence and young adulthood, whilst accessibility needs and childhood victimisation were highest among those in early adolescence. Child-to-parent abuse was highest among those in early- and late-adolescence, whilst intimate partner abuse was highest among those in young adulthood. The findings of this study support the use of developmentally-tailored and trauma-informed assessment and intervention approaches for family violence-involved youth.

Keywords: Family violence, youth violence, adolescence, child-to-parent abuse, intimate partner abuse

Characteristics of Young People who use Family Violence in Adolescence and Young Adulthood: An Age-based Analysis

Family violence (FV) use by young people is increasingly recognised by clinicians, law enforcement, and academics as a significant public health and social problem that remains largely unreported (Fitz-Gibbon et al., 2018; Kuay & Towl, 2021). Focusing research on young people who engage in FV behaviour, including how this behaviour differs in adolescence and young adulthood, can provide important cues for tailoring interventions to meet the needs of these young people and reduce further violence. Self-report studies have examined differences in the characteristics (e.g. sex of FV-user and victim) of young people who use intimate partner abuse according to age (Johnson et al., 2015; Kaufman-Parks et al., 2018). However few studies compare the correlates of youth FV across developmental stages in the context of other relationships of abuse (e.g. child-to-parent abuse, sibling abuse) or using officially recorded data (see Snyder & McCurley, 2008 for an exception). Research based on official data may be beneficial to assist in identifying the age-related risks and needs of those potentially more acute families and individuals presenting to police and other services, which can then be used to inform risk assessment, management, intervention.

Conceptualising Youth Family Violence

Youth FV is a broad term which involves abuse by young people aged 10-24 years toward relatives (e.g. parents, siblings, other relatives) and intimate partners, and includes both physical (e.g. physical assault, sexual assault, etc.) and non-physical (e.g. psychological abuse) behaviour. There is increasing recognition that those up to the age of 25 years living in industrialised nations often remain closely engaged with the family system (Arnett, 2000) and continue to develop neurocognitively and psychosocially into young adulthood (Cohen et al., 2016; Scott et al., 2016). The World Health Organisation (WHO) has formally recognised the parallels between those in adolescence and young adulthood, with the WHO defining 'young people' as those aged 10-24 years (WHO, 2021).

Despite growing recognition of the similarities between adolescents (aged 10-19 years) and young adults (20-24 years), the youth FV literature has largely examined the two cohorts separately. This is particularly so for research involving official administrative data (compared to self-report data) and is likely the result of the legal demarcation between children (aged under 18 years) and adults (aged 18 years and over). Similarly, most youth FV literature has been organised around a single form of relational abuse (e.g. child-to-parent abuse, intimate partner abuse, sibling abuse), resulting in a lack of recognition of the interconnectedness of the various forms of violence and abuse (Chan et al., 2021; Hamby & Grych, 2013). A significant minority of young people who engage in abusive behaviour do so across more than one type of relationship (Boxall & Morgan, 2020; Boxall & Sabol, 2021; Kuay & Towl, 2021), suggesting that narrowly focusing on a single relationship of abuse underrepresents the true extent and negative impact of youth FV (Hamby & Grych, 2013). Positively however, there has been evidence of a shift toward capturing multiple relationships of abuse concurrently (Boxall & Sabol., 2021; Jolliffe Simpson et al., 2021).

Recognising the interconnectedness of different forms of youth FV and how characteristics may differ across developmental stages will help advance a more complete and developmentally-sensitive understanding of youth FV. This knowledge, in turn, can be used to inform the development of evidence-based assessment and intervention approaches (Hamby & Grych, 2013).

The Relevance of Developmental Stage of Youth Family Violence Users

A young person's developmental stage is an important factor in the assessment and management of risk. Age at onset of antisocial behaviour, such as offending and family violence, is particularly relevant for examining the progression and maintenance of offending trajectories (Farrington, 2017), including risk of violence recidivism (Borum, 2000; Piquero et al., 2015). However, there is also a small body of literature suggesting that the saliency of criminogenic needs may vary according to how old a young person is at the time of the index incident (van der Put et al., 2011, 2012). Criminogenic needs are those factors known to cause criminal behaviour (including FV) and include: history of antisocial behaviour, antisocial personality pattern, antisocial cognition, antisocial associates, family/marital circumstances, school/employment, leisure/recreation, and substance abuse (Bonta & Andrews, 2016). Given the differing saliency of these needs with age, and their strong association with criminality and FV, further examination of the nature of these differences and their implications for assessment and intervention is needed.

The trajectory from early adolescence to young adulthood is a time of profound change (Arnett, 2000), characterised by a decreasing level of parental involvement, greater sense of personal autonomy and identity, greater reliance on peers and intimate relationships, and elevated levels of mental health issues (Arnett, 2000; Sawyer et al., 2018). Similarly, there is a rise in risk-taking behaviour and substance use in late adolescence and early adulthood, followed by a decline thereafter (Brodbeck et al., 2013; Scott et al., 2016). These changing needs and priorities inevitably have the potential to place stress upon the familial system and broader social context, potentially contributing to changes in FV risk with age.

Differences in the Characteristics of Youth Who Use Family Violence by Age

There is limited research examining age-based variations in the sociodemographic, psychosocial, and FV-related characteristics of young people who come to police attention for engaging in FV. Therefore, findings from non-FV offending research, as well as comparisons between adolescent and adult FV literature, are also examined here. Variations in the characteristics of young people according to age are important to understand given age

at the time of the incident can affect the saliency of risk factors, including the influence of various dynamic and statistic risk factors on recidivism (van der Put et al., 2011, 2012).

Sociodemographic Characteristics

Young people who come to police attention for FV are likely to be male (Phillips & McGuinness, 2020; Snyder & McCurley, 2008) and to target a female victim (Boxall & Morgan, 2020; Freeman, 2018; Snyder & McCurley, 2008; Simmons et al., 2018). Yet, agebased variations exist, with research showing a greater proportion of female FV-users during adolescence than in young adulthood (Walsh & Krienert, 2007) and adulthood (Phillips & McGuinness, 2020; Snyder & McCurley). This is consistent with the broader offending literature (Cardwell & Piquero, 2018). There is also some evidence among the youth offending literature that intellectual disabilities are more prevalent among adolescents compared to adults (Richards, 2011), however the literature is limited and no comparisons across developmental periods have been made in the youth FV literature. Similarly, there is an absence of research comparing age-related variations in FV behaviour and offending according to socioeconomic status (SES) or rurality of residence. However, it has been shown that those from rural areas and low SES backgrounds are over-represented among youth who engage in FV (Phillips & McGuinness, 2020) and other offending (Perreault, 2019).

Psychosocial Characteristics

The prevalence of psychosocial characteristics, including mental health issues, substance abuse, and education/employment issues, differ with age. Phillips and McGuinness (2020) showed adolescent (aged 10-17 years) FV-users experienced more mental health problems, but less issues with substance abuse, than adult FV-users. Research from the broader offending literature suggests that substance abuse, as well as education/employment issues increase from early to late adolescence (van der Put et al., 2011, 2012), while Spruit and colleagues (2017) found those aged 18-25 years display significantly more issues with

substance abuse than adults aged 26 years and over. Taken together, these studies suggest the presence of age-related variation in mental health issues, substance abuse, and education/employment issues. However, further research is needed to examine how they differ across the key developmental periods of early adolescence (10-14 years), late adolescence (15-19 years), and young adulthood (20-24 years).

The broader youth offending literature similarly shows age-related variations exist regarding young people's victimisation experiences. Those who commence engaging in offending behaviour aged 14 years or younger (i.e. early-onset offenders) display significantly higher rates of prior victimisation than those who commence offending in later adolescence (aged 15 years and older; Jolliffe et al., 2017). However, an Australian report examining young people's contact with the justice system noted young people aged 15 to 24 years to be at a higher risk of assault victimisation than any other age group (Richards, 2011). These results suggest early adolescent offenders, and potentially early adolescent FV-users, display higher rates of childhood victimisation, while those in late adolescence and young adulthood may experience higher rates of assault victimisation that occur more proximally to their offending behaviour.

Family Violence Characteristics

The characteristics of youth FV incidents – including victim sex, the relational dyad of abuse, and the prospect of recidivism – are also relevant for assessment and intervention purposes. It is clear that females are disproportionately the victims of both youth and adult FV, and that adults are significantly more likely to target females than their younger counterparts (Phillips & McGuinness, 2020; Snyder & McCurley, 2008). There is limited research examining how victim sex may differ across adolescence and young adulthood. However, the child-to-parent abuse literature suggests the proportion of fathers being targeted by male sons increases in late adolescence and young adulthood (Simmons et al., 2018).

There is similarly age-related variation in the relationships in which abuse is likely to occur, with child-to-parent abuse shown to be most common among early- and lateadolescent FV-users, while intimate partner abuse appears to be most common among young adults (Phillips & McGuinness, 2020; Snyder & McCurley, 2008). Further understanding of the variations in victim selection, including both victim sex and the relationship of abuse, can assist in identifying the most likely targets of abuse and inform intervention approaches for key age groups (e.g. identifying any relationship-specific dynamics, including parent-child conflict and limit-setting, or intimate partner-specific factors).

The lack of research regarding age-related variation in youth FV recidivism outcomes represents a distinct gap in the literature, as age is an important responsivity characteristic (Higley et al., 2019) which has been shown to impact the saliency of risk factors (van der Put et al., 2011, 2012) and is an important consideration in risk assessment (Borum, 2000, 2016). Drawing on the non-FV youth recidivism literature, van der Put and colleagues (2011) found non-FV recidivism among Dutch adolescents (aged 12-18 years, n = 1396) over a two-year follow-up period to be lowest in those aged 12-13 years, peak between ages 14-15 years, and decline in those aged 16-17 years. Additionally, in an adult sample of Dutch offenders (n = 8665), Spruit and colleagues (2017) found recidivism to be significantly higher among those aged 18-25 years, compared with offenders aged 26 years and over. Similar findings regarding the elevated rate of recidivism among young adults compared to older adults have been found in Australian studies examining FV recidivism (Millsteed & Coghlan, 2016; Fitzgerald & Graham, 2016).

Limitations of the Existing Literature

There are important limitations to be cognisant of in relation to the available research regarding age-related variations in the sociodemographic, psychosocial, and FV-related characteristics of young people who engage in FV. First, while there is evidence clearly

differentiating the characteristics of adolescents and adults who come in contact with police for engaging in both FV and non-FV behaviour, there is a lack of literature focusing on how characteristics of young people differ across key developmental periods, which impedes the capacity of clinicians to deliver developmentally-informed risk management and intervention approaches. Second, a substantial proportion of the literature cited as part of the introduction relates to non-FV offending among young people, indicating a need for more research in this area. Third, the youth-focused literature primarily examines the period of adolescence (i.e. up to age 18 years) and infrequently considers young adults. Including young adults alongside adolescents when studying youth FV is important given young adults are more akin to adolescents in terms of neurological and psychosocial development (Cohen et al., 2016; Scott et al., 2016) and are increasingly remaining closely entwined with the family system in industrialised nations (Arnett, 2000). Understanding age-related differences in sociodemographic, psychosocial, and FV-related characteristics across both adolescence and young adulthood will improve the capacity of clinicians to conduct developmentallyinformed assessments and interventions with young FV-users (Borum, 2000; van der Put et al., 2011, 2012).

The Present Study

The present study aimed to: (a) provide a descriptive overview of a population cohort of young people (aged 10-24 years) who came to police attention for using FV; and (b) determine whether there were age-related differences in the sociodemographic, psychosocial, and FV-related characteristics of young people at their index FV incident (i.e., the incident leading to inclusion in the study). Comparisons were made across three groups representing key developmental periods of early adolescence (10-14 years), late adolescence (15-19 years), and young adulthood (20-24 years). Three key research questions were addressed:

- Do differences exist between early adolescence, late adolescence, and young adulthood in relation to the sociodemographic characteristics (i.e., gender, socioeconomic status (SES), and accessibility needs) of young people reported to police for using FV?
- 2. Do differences exist between early adolescence, late adolescence, and young adulthood in relation to the psychosocial characteristics (i.e., mental health issues, substance abuse issues, unemployment/school truancy, and victimisation histories) of young people reported to police for using FV?
- 3. Do differences exist between early adolescence, late adolescence, and young adulthood regarding FV-related characteristics (i.e., gender of victim, relational dyad of abuse, and family violence recidivism) of youth reported to police for using FV? It is expected that most FV-users will be male, and most victims will be female

(Simmons et al., 2018; Snyder & McCurley, 2008). The proportion of male FV-users, and the prevalence of substance abuse and intimate partner abuse, is anticipated to be greatest among those in late adolescence and young adulthood (Snyder & McCurley, 2008; Spruit et al., 2017; van der Put et al., 2011). Similarly, child-to-parent abuse is hypothesised to be higher among early- and late-adolescent FV-users, compared with those in young adulthood (Snyder & McCurley; Phillips & McGuinness, 2020). There is insufficient prior research examining age variations in the other sociodemographic, psychosocial, and FV-related characteristics from which to make informed hypotheses.

Methodology

The study used a pseudo-prospective follow-up design employing administrative data from Victoria Police databases. Victoria Police are the sole policing agency for the Australian state of Victoria (population 6.63 million at the time of the study; 67% of whom live in the state's capital city of Melbourne; Australian Bureau of Statistics, 2021) and record all

reported incidents of FV as a matter of policy, regardless of whether criminal charges were laid. Not all forms of FV identified under the Act constitute a criminal offence (e.g. no specific charges are associated with psychological abuse or coercion in Victoria at the time of publication). In Victoria, only half (n = 47468, 50.8%) of all FV incidents reported to the Police between July 2020 and June 2021 involved a criminal offence for which charges were laid (Crime Statistics Agency, 2021).

Definitions

The present study uses the terms *young person who uses family violence* and *family violence-user* (FV-user) in recognition of the need to consider young people as more than their behaviour, and to encourage a person-centred approach to conceptualisation of youth FV. Family violence was defined in the present study according to Victoria's Family Violence Protection Act 2008. According to the Act, FV is defined as:

Behaviour by a person towards a family member of that person if that behaviour is physically or sexually abusive; or is emotionally or psychologically abusive; or is economically abusive; or is threatening; or coercive; or in any other way controls or dominates the family member and causes that family member to fear for the safety and wellbeing of that family member or another person. (Family Violence Protection Act, 2008, s.5)"

Family member refers to relatives, intimate partners, children who normally reside with the victim and/or FV-user, as well as "any other person whom the relevant person regards or regarded as being like a family member" (Family Violence Protection Act, 2008, s.8), such as foster carers or the carer of a person with a disability. As mentioned above, the behaviour of an FV-user may or may not constitute a criminal offence.

The developmental periods of interest to the present study were primarily derived from the World Health Organisation (WHO, 2021). The WHO defines 'young people' as

those aged 10-24 years and identifies those aged 10-14 years as being in a period of 'early adolescence', while those aged 15-19 years are in a period identified as 'late adolescence' (WHO, 2021). 'Young adulthood' included those aged 20-24 years, consistent with previous literature examining youth FV (Simmons et al., 2020).

Sample

The present study examined all police-reported incidents of FV (including multiple incidents for the same FV-user) in which a young person (aged 10-24 years) was identified as the FV-user (or *Respondent*, in police parlance) over the four-month period between 1 September 2019 and 31 December 2019 (index period; N = 5014). These data were extracted from a wider population sample of all 24,419 FV reports recorded by police during the same period, of which 358 (1.50%) had missing age data and were excluded from selection for this sample. The index incident data obtained for each FV-user were linked with historical data held in police databases and FV recidivism data collected over a six-month follow-up period.

Over two thirds of young people who used FV were identified as male (n = 3528, 70.40%), while 29.61% (n = 1484) were female. There was no sex information for two young people (0.04%), who were excluded from analyses involving the young FV-user's sex. The mean age of the sample was 19.19 years (SD = 3.51) at the time of the index incident.

Ethics

The study was approved by the *Blind for Review* and the *Blind for Review* Human Research Ethics Committee.

Data Source

All information relating to FV incidents is recorded using FV reports and is stored on Victoria Police's Law Enforcement Assistance Program (LEAP) database, which is used by Victoria Police to record all known offences and police involvements (FV- and non-FV-related) for an individual, regardless of outcome (e.g. arrested, charged, convicted).

Whenever Victoria Police members respond to an incident of FV, they record characteristics of the incident, the victim, the person using FV, and their relationship as part of a FV report. The FV report used by police contains demographic information of FV-users and victims, as well as 39 separate risk factors associated with future FV or lethal FV incidents, allowing Victoria Police to routinely collect information on a range of evidence-based factors related to future FV events (McEwan et al., 2019). All available data from the FV reports involving a unique relationship dyad during the index period was linked to historical and outcome data for each young FV-user and victim. Historical data included information relating to involvement in past police-reported FV incidents for both the FV-user and the victim, history of non-FV offending by the young person, the presence of restraining orders (either past or current) against the young person. Family violence recidivism was recorded over a six-month period following the index incident.

Sociodemographic Variables

The sex of young FV-users and the presence of any accessibility needs are recorded on the FV report at the time of the index incident. Accessibility needs of the FV-user form a component of the FV report and request responding police officers to identify whether the young person has issues relating to vision, hearing, mobility, understanding, communication, or memory. These items are scored according to police questioning and discretion (i.e. the officer may notice the young person has one or more of these issues, or they may ask the victim, FV-user, or third party whether the young person has any of these difficulties). Due to low prevalence of accessibility needs being recorded by police (n = 102, 2.03%), these items were grouped together and coded as a binary variable (i.e. either present or absent).

An approximation of socioeconomic status (SES) was coded using the ABS (2018a) Index of Relative Socio-Economic Advantage and Disadvantage (IRSAD; using Victoria-

specific rankings). Socioeconomic status of young FV-users was identified using the postcode recorded on the FV report and its corresponding IRSAD decile obtained from ABS (2018a) data. Three groups were then created for the present study, with the first group comprising those in the lowest 20% SES (deciles one and two), middle 60% SES (deciles three to seven), and highest 20% (deciles eight to ten).

The location (metropolitan and rural/regional) of the index incident was identified in a similar manner using the ABS (2018b) data. This involved identifying the location of the index incident according to the remoteness area classification (i.e. major cities of Australia, inner regional Australia, outer regional Australia, remote Australia, very remote Australia) using the postcode of the index FV incident recorded by police. Those incidents occurring in a postcode classified as 'major cities of Australia' were coded as metropolitan, while incidents occurring in any one of the four other classifications were identified as rural/regional. The rate of youth family violence per 100,000 people for regional and metropolitan locations was also examined, with population estimates obtained from ABS (2021) data. A similar methodology to code socioeconomic status and rates for regional and metropolitan locations has been employed previously in the examination of adolescent FV in Australia (Phillips & McGuinness, 2020).

Psychosocial Variables

Variables related to the presence of mental health issues, substance abuse, and unemployment/school truancy were recorded in a binary manner (i.e. present or absent), primarily ascertained using police questioning and discretion (i.e. asking the young person if they use substances, asking the victim if the young person has mental health issues or has issues with school/employment, noticing the young person appears substance affected at the time of the incident), and did not require the presence of a formal diagnosis to be scored in

the affirmative. As a result, prevalence of these issues in the present study are likely to represent relatively gross estimates.

Data relating to victimisation history of the young FV user was obtained from historical FV reports on LEAP in which the index FV user was ever listed as a victim of family violence. Childhood FV victimisation refers to those young people who were reported to police as a victim of FV aged 0-11 years.

Family Violence-Related Variables

Victim characteristics, including victim sex, age, and presence of a disability or mental health issues, are recorded in a binary manner (i.e. male or female; presence of a disability, presence of mental health issues) on the FV report at the time of the index incident. The relationship of abuse was recorded by the responding police officer according to the type of relationship between the victim and FV-user (i.e. child-to-parent abuse, intimate partner abuse, sibling abuse, other family abuse) at the time of the index incident. The category relating to abuse of other family members may include grandparents, uncles, aunts, cousins, carers, or the child of the young FV-user. Data pertaining to FV recidivism of the young person was obtained from any FV reports uploaded to LEAP in the six months following the index incident in which the young person was reported for using FV again toward any person.

Data Analysis

Data were analysed using IBM SPSS Statistics, version 28 (2020). Family violenceusers were first grouped into one of three developmental periods based on their age at the index incident (i.e., early adolescence, late adolescence, and young adulthood). Descriptive statistics were then provided for the sample overall and by age group. A series of binary logistic regressions with odds ratios as a measure of effect size were conducted to compare the age groups on variables of interest. Specifically, multiple comparisons were conducted for key sociodemographic, psychosocial, and FV-characteristics, with a Bonferroni-Holm

correction applied to control for Type I error. Analyses related to the relationship in which abuse occurred at the index incident (child-to-parent abuse, intimate partner abuse, sibling abuse, child maltreatment, and other family abuse) and SES (i.e. lowest 20% SES) used binary dummy variables. For example, when determining whether child-to-parent abuse was more common among early adolescent compared with young adult FV-users, child-to-parent abuse was coded as 1 and all other relational dyads were coded as 0.

Additional analyses comparing the rate of FV per 100,000 people according to the young person's age were also conducted. The rate per 100,000 was established for those aged 10-14 years (metropolitan rate: 7.55; rural/regional rate: 13.57), 15-19 years (metropolitan rate: 23.69; rural/regional rate: 43.50) and 20-24 years (metropolitan rate: 32.64; rural/regional rate: 57.00) at the index incident. These were calculated using the populations of Victorian metropolitan (5,229,920 people) and regional (1,466,750 people) areas provided by the Australian Bureau of Statistics for the year 2020 (ABS, 2021).

A Kaplan-Meier survival curve was used to compare time to FV recidivism among early adolescent, late adolescent, and young adult FV-users. A log rank test was used to compare survival distributions across the three age groups.

Results

The results section is organised into two segments aligning with the study aims. The first segment provides a descriptive overview of the sample, while the second segment provides age-related comparisons of youth FV.

Descriptive Overview

The characteristics of young FV-users and their FV behaviour at the time of the index incident are provided in Table 1. Of the total sample, 11.85 % (n = 594) were aged 10-14 years, 37.44% (n = 1877) were aged 15-19 years, and half (n = 2543, 50.72%) were aged 20-24 years. Regardless of age, young people who engaged in FV were overwhelmingly male

and there was an over-representation of youth in the lowest socioeconomic quintile. There was a high proportion (between 41-43%) of young people with mental health issues across all age groups, while substance abuse issues and unemployment/school truancy became more prevalent with age. The prevalence of FV victimisation experiences increased with age, however the proportion of those who had experienced police-reported childhood FV victimisation (i.e. aged 0-11 years) was greatest among early adolescents.

Child-to-parent abuse and intimate partner abuse were the most common relationships of abuse at the index incident, with the proportion of child-to-parent abuse incidents being highest among early- and late-adolescent FV-users, while the proportion of young people using intimate partner abuse increased with age and was most common among young adults. Despite this, approximately one in twenty (4.71%) early adolescents engaged in intimate partner abuse, and over one quarter (25.56%) of young adults engaged in child-to-parent abuse. Over one quarter (28.30%) of all youth had ever been abusive across more than one type of relationship, while over one third (35.24%) were reported to police for FV recidivism within the subsequent six months.

Regardless of the young FV-user's age, victims of youth FV incidents were overwhelmingly female (n = 3660, 73.04%) with a mean age of 33.49 years (SD = 15.45). One fifth (20.72%) of all victims were reported to have a mental health issue, while 3.82% of victims were identified as a having a disability.

Additional analyses showed that the rate of youth FV was significantly higher in rural/regional areas compared to metropolitan locations across all age groups. The rate of youth FV per 100,000 of the population across rural/regional and metropolitan areas of Victoria was examined according to age of the FV-user at the index incident. The rate of youth FV incidents were 1.79 times greater in rural/regional areas for early adolescent FV-users, and 1.83 times greater in rural/regional areas for late adolescents, compared to

metropolitan areas. For those in young adulthood, the rate of youth FV was 1.75 times greater in rural/regional compared to metropolitan areas.

Age-Related Differences in Youth Family Violence

The results of analyses testing for significant age-related differences in key sociodemographic, psychosocial, and family violence characteristics are presented in Table 2.

Sociodemographic Characteristics

Significant age-related differences in the young FV-user's sex, socioeconomic status (SES) and accessibility needs were observed. Young adult FV-users are significantly more likely to be male than their adolescent counterparts, while early adolescent FV-users display a higher proportion of females compared to young adults FV-users. In contrast, early adolescent FV-users appeared to differ significantly from their young adult counterparts in relation to SES and accessibility needs. Compared to those aged 15 years and over, early adolescent FV-users were significantly less likely to be in the lowest SES quintile (i.e. lowest 20%), however their odds of experiencing accessibility needs were 1.80-2.66 times higher.

Psychosocial Characteristics

No significant age-related differences in the likelihood of a young FV-user having mental health issues were observed, however age-related differences were found in relation to substance abuse, unemployment/school truancy, and police-reported FV victimisation histories. Substance abuse issues became more prominent as the young FV-user's age increased, as did the proportion of young people who had experienced FV victimisation. However, police-reported experiences of childhood FV victimisation (i.e. occurring between 0-11 years) were greatest among early adolescent FV-users, with their odds of having experienced early FV victimisation being two and six times greater than those of late adolescents and young adults, respectively.

Family Violence Characteristics

Significant age-related differences were observed for victim sex and the relationship in which the abuse occurred during the index incident. Early adolescent FV users were between 30-43% more likely to aggress against a female victim than those aged over 15 years and were substantially more likely to engage in child-to-parent abuse than the two older groups. The odds of an early adolescent FV-user engaging in child-to-parent abuse were 6.01 times greater than for young adults, and 1.89 times greater than late adolescent FV-users. In contrast, the odds of a young adult FV-user engaging in intimate partner abuse were 24.45 times higher than early adolescents and 3.39 times higher than those in late adolescence.

No significant age-related differences were observed for rates of FV recidivism. Figure 2 depicts the Kaplan-Meier curve examining time to FV for early adolescent, late adolescent, and young adult FV-users. A log-rank test showed no statistically significant differences in the survival distribution for the three age groups ($\chi^2(2) = 3.77$, p = .152).

Discussion

The present study sought to provide a descriptive overview of young people aged 10-24 years who come to police attention for using FV, and to determine whether characteristics of the young people and their FV behaviours differed across three key developmental periods: early adolescence (10-14 years), late adolescence (15-19 years), and young adulthood (20-24 years). Significant differences in the sociodemographic, psychosocial, and FV-related characteristics emerged across these cohorts, highlighting the potential relevance of youth development to the processes of assessment, management, and intervention.

The findings pertaining to sociodemographic characteristics of young people who engage in family violence are largely consistent with existing research showing adolescent FV-users are overwhelmingly males who target female victims (Freeman, 2018; Simmons et al., 2018; Snyder & McCurley, 2008; Walsh & Krienert, 2007) and are disproportionately from rural/regional areas (Phillips & McGuinness, 2020). Although there has been some

dispute regarding the role of SES in youth FV (Simmons et al., 2018), the present thesis found young FV-users were disproportionately from the lowest SES quartile (i.e. lowest 20%). The overlap of young people from both low SES and rural/regional backgrounds is consistent with previous research by Phillips and McGuinness (2020) showing 61.1% of FV incidents in rural/regional areas took place in the lowest SES quintile (lowest 20% SES), compared to just 29.6% of metropolitan areas.

Consistent with our hypotheses, FV-users were disproportionately male, and victims were overwhelmingly female across all age groups. However, in relative terms, sex differences existed across the three groups. Young adult FV-users were significantly more likely to be male and target male victims compared to their early- and late-adolescent counterparts, while those in early adolescence had a higher proportion of female FV-users and a higher proportion of female victims, although the effect sizes were small. At first glance these results may seem counterintuitive. Given the gendered nature of FV is most prominent among adults (Snyder & McCurley, 2008) it might be expected that the proportion of female victims increased alongside the increasing prevalence of male FV-users as young people aged. These findings are likely explained by the higher proportion of fathers being targeted by older youth (i.e. those in late adolescence and young adulthood; Simmons et al., 2018), the decline in prevalence of female family violence-users with age (Simmons et al., 2018; Snyder & McCurley, 2008), and the tendency for females to target female victims (Boxall & Sabol., 2021; Freeman, 2018; Snyder & McCurley, 2018), although this latter finding has not been consistently reported in other studies (Simmons et al., 2018).

The elevated rates of unemployment/school truancy and substance abuse among late adolescent and young adult FV-users, in addition to the consistent rates of FV recidivism across all age groups, may be partially explained using the "age-risk factor paradox" (van der Put et al., 2011, p. 258) from the general offending literature. This paradox suggests dynamic

risk factors (i.e. criminogenic needs such as substance abuse and unemployment/school truancy) are least prevalent, but most predictive of recidivism, among those aged under 14 years old. In contrast, among those 14 years and over, there is a higher prevalence of dynamic risk factors, but they are less strongly predictive of recidivism (van der Put et al., 2011). Given the present paper only examines two criminogenic needs it is not possible to determine whether the age-risk factor paradox is present in youth FV, however the variation in dynamic risk factors among young FV-users provides an interesting avenue for future research.

Additional age-based analyses related to mental health issues, accessibility needs, and history of FV victimisation indicates the presence of age-related variation in noncriminogenic needs that may impact upon a young person's responsivity to intervention. Mental health needs occurred at elevated rates across all age groups, indicating an important responsivity consideration when attempting to intervene with this cohort, regardless of age. Early adolescent FV-users were significantly more likely to have been reported as the victim of police-reported FV as a child (aged 0-11 years) than those in late adolescence and young adulthood, which is broadly consistent with studies demonstrating a link between childhood victimisation and accelerated onset of offending (Jolliffe et al., 2017; Simmons et al., 2018). However, it is possible that these results are reflective of improved police recording practices surrounding child victims of FV in recent years, which may in part account for the age variation, particularly given the effect sizes in the present study were small. Finally, early adolescents were also more likely to be reported as having accessibility needs (i.e. issues with communication, understanding, memory, mobility, vision, and/or hearing), indicating that disability-related factors may be more applicable to the use or management of FV among this cohort than among late adolescent and young adult FV-users.

The higher rate of FV in rural/regional areas (compared to metropolitan locations) is also an important responsivity factor relevant to management and intervention. The high rate

of youth FV in rural/regional areas observed in the present study indicates that the rural/regional disparity in adult FV (Peek-Asa et al., 2011) is similarly reflected in youth FV. Phillips and McGuinness (2020) note that those who engage in FV in rural/regional areas are also more likely to come from lower SES backgrounds than those in metropolitan locations, while Reid and Ervin (2015) note a significant lack of general and FV-specific resourcing in rural/regional areas. This suggests young FV-users in rural/regional areas may be at greater risk of experiencing compounding disadvantage compared to their metropolitan counterparts.

Limitations

The present study is limited in several respects. First, the use of official police records to determine FV will have underestimated the true extent of youth FV and recidivism, as not all cases are reported to police. Relatedly, recidivism data was limited to six-months followup and outcomes were also likely impacted by the intervention of police and other services. While these issues limit the generalisability of findings, and prevent conclusions being drawn for recidivism beyond six-months, the results of the present study are particularly relevant to stakeholders that rely on FV being reported in order to intervene, including police, youth justice, and other community services. Second, the results are based on police-reported incidents of youth FV, not necessarily incidents in which a criminal offence or arrest has occurred, thereby limiting comparison with other studies which do use offence and/or arrest data, although it also ensures a broader spectrum of FV behaviours is examined.

Third, the recording of data was completed by responding police officers at the time of the index FV incident, which may increase the risk of recording errors given the dynamic and often high-stress situations in which FV occurs. Similarly, the data pertaining to mental health and substance abuse issues is ascertained using police questioning and discretion (i.e. asking the young person if they use substances, asking the victim if the young person has mental health issues, noticing the young person appears substance affected), meaning the

results in the present study may be relatively gross estimates of the prevalence of these issues. However, the use of police-reported data to examine prevalence of mental health and substance abuse issues has been used previously (Millsteed & Coghlan, 2016; Phillips & McGuinness, 2020). Fourth, the present study has examined correlates of FV and how these differ across groups, however specific analyses examining whether these correlates relate to FV behaviours and recidivism were not conducted. Given this, further research is needed examining whether the drivers of FV recidivism differ across developmental groups.

Fifth, the lack of data pertaining to race and ethnicity represents an important limitation of the present study. Unfortunately, there is no reliable way for Victoria Police to ascertain the ethnicity of individuals involved in a family violence incident (McEwan et al., 2019), however this represents an important avenue for future research.

Practical Implications

Despite the limitations of this study, the findings highlight several important implications for risk assessment, management, and intervention. First, results underscore the importance of employing developmentally sensitive assessment and screening practices. Second, the higher prevalence of substance abuse and unemployment/school truancy among older youth (aged 15-24 years) may suggest young FV-users, similar to young non-FV offenders (van der Put et al., 2011, 2012), display age-related variation in criminogenic need. However, this is simply a hypothesis as only two variables (substance abuse and unemployment/school truancy) were examined in the present study, and both represent broad proxies of criminogenic need, emphasising the need for further research in this area.

Third, the high prevalence of mental health issues and FV victimisation across all age groups provide support for existing research suggesting the need to provide mental healthand trauma-informed practice when working with this population (Fitz-Gibbon et al., 2018). Similarly, child and youth mental health services may be particularly important in the early

detection and ensuing intervention with young FV-users and their families (van der Put et al., 2011, 2012), which may improve outcomes and reduce future contact with the legal system. Fourth, age-based analyses suggest interventions for young people in late adolescence and early adulthood (i.e. 15-24 years) will likely need to target a wider range of factors than interventions for those in early adolescence. Such interventions will likely need to concurrently address mental health issues, substance abuse, history of FV victimisation, and unemployment/school truancy. Fifth, additional training for police, youth justice and other service providers (e.g. child and youth mental health services, disability services, FV-specific services) regarding age-related variations in need and responsivity issues may assist in developmentally sensitive referrals and assessments being made.

Sixth, the over-representation of young people from rural/regional locations indicates a need for additional resource allocation in these areas. FV-users in rural/regional locations typically need to travel greater distances to obtain support (Peek-Asa et al., 2011). This may increase their risk of disengagement from services, and potentially reduces their likelihood of engaging with services in the first instance. Similarly, given the lack of resources in rural/regional locations, the geographical isolation, and the lower SES status (Phillips & McGuinness, 2020), safety planning with victims can be complicated. The need to travel further in order to access supports (Peek-Asa et al., 2011), combined with a higher level of socioeconomic disadvantage, and a relative lack of crisis services in rural/regional areas, means victims are often left with few options when attempting to leave – or obtain respite – from abusive home situations (Peek-Asa et al., 2011). While there is a significant lack of research examining the rural/regional and metropolitan divide in the youth FV literature, strategies to manage and intervene with young FV-users in rural/regional locations may be adapted from the adult literature which have previously examined this issue (Campo et al., 2015).

Conclusion

The present study adds to existing evidence by examining how the sociodemographic, psychosocial, and FV-related characteristics of youth FV differ according to the developmental periods of early adolescence, late adolescence, and young adulthood. Management and intervention approaches will need to be cognisant of the elevated mental health issues and police-reported FV victimisation across all age groups while also considering the age-related variation in sociodemographic, psychosocial, and FV-related characteristics which exist. The results provide support for the provision of developmentally sensitive assessment, management, and intervention approaches for young people who engage in FV and emphasise the high rate of FV in rural/regional locations.

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Table 1.

Characteristics of young people who use family violence and their family violence behaviour at the time of the index incident

		10-14 years	15-19 years	20-24 years <i>n</i>	Total, <i>n</i> (%)
		n (%)	n (%)	(%)	
N		594 (11.85)	1877 (37.44)	2543 (50.72)	5014 (100%)
Sociodemographic Characteristics of FV-User					
Male sex		383 (64.48)	1290 (68.80)	1855 (72.95)	3528 (70.39)
Age (<i>M</i> , <i>SD</i>)		12.92 (1.18)	17.22 (1.39)	22.11 (1.41)	19.19 (3.51)
Accessibility needs		23 (3.87)	41 (2.18)	38 (1.49)	102 (2.03)
Socioeconomic status	Lowest 20%	174 (29.29)	644 (34.31)	861 (33.86)	1679 (33.49)
	Middle 60%	346 (58.25)	983 (52.37)	1369 (53.83)	2698 (53.81)
	Highest 20%	74 (12.46)	250 (13.32)	313 (12.31)	637 (12.70)
Location of FV incident	Metropolitan	395 (66.50)	1239 (66.01)	1707 (67.13)	3341 (66.63)
	Rural/regional	199 (33.50)	638 (33.99)	836 (32.87)	1673 (33.37)
Psychosocial Characteristics of FV-User					
Mental health issues		247 (41.58)	817 (43.53)	1068 (42.00)	2132 (42.52)
Substance abuse issues		58 (9.76)	601 (32.02)	983 (38.66)	1642 (32.75)
Unemployment/school truancy		156 (26.26)	726 (38.68)	950 (37.36)	1832 (36.54)
Ever been the victim of a FV incident		197 (33.16)	757 (40.33)	1085 (42.67)	2039
					(40.67)

Experienced early FV victimisation (aged 0-11		112 (18.86)	172 (9.16)	92 (3.62)	376 (7.50)
years)					
Family Violence Characteristics of FV-User					
Relational dyad of abuse	Child-to-parent abuse	400 (67.34)	979 (52.16)	650 (25.56)	2029 (40.47)
	Intimate partner abuse	28 (4.71)	494 (26.32)	1392 (54.74)	1914 (38.17)
	Sibling abuse	83 (13.97)	243 (12.95)	256 (10.07)	582 (11.61)
	Child maltreatment	0	2 (0.11)	29 (1.14)	31 (0.62)
	Other family abuse ^a	83 (13.97)	159 (8.47)	216 (8.49)	458 (9.13)
Charged with criminal offence at index incident		149 (25.08)	785 (41.82)	1247 (49.04)	2181 (43.50)
Police applied for restraining order at index		86 (14.48)	482 (25.68)	504 (19.82)	1072 (21.38)
incident					
Ever been abusive across >1 relational dyad		50 (8.42)	468 (24.93)	901 (35.43)	1419 (28.30)
Engaged in FV recidivism		203 (34.18)	698 (37.19)	866 (34.05)	1767 (35.24)
Victim Characteristics					
Female sex		464 (78.25)	1376 (73.39)	1820 (71.57)	3660 (73.04)
Age (M, SD)		35.90 (16.67)	35.11 (15.81)	31.75 (14.68)	33.49 (15.45)
Mental health issues		92 (15.51)	384 (20.48)	560 (22.13)	1036 (20.72)
Identified as having a disability		24 (4.05)	90 (4.80)	77 (3.04)	191 (3.82)

Note. FV = family violence.

^aOther family abuse may include abusive behaviour toward grandparents, uncles, aunts, cousins, carers, or the young FV-user's child.

Table 2

Multinly comparisons gramining sociodomographic newchosocial and inder tamily violonce characteristics according	
	$n H V = n C \rho V n G \rho$
Multiple comparisons examining sociodemographic, psychosocial, and index family violence characteristics according to	or inscruze

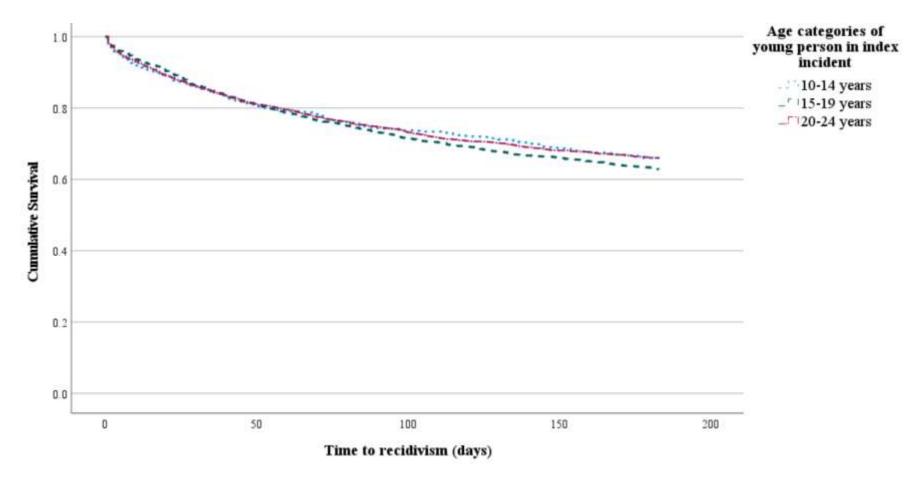
			Multip	le Comparisons		
	10-14 years v 15-19 years		10-14 years v 20-24 years		– 15-19 years v 20-24 years	
	$\chi^{2}(p)$	OR [95% CI]	$\chi^2(p)$	OR [95% CI]	$\chi^2(p)$	OR [95% CI]
Sociodemographic Characteristics						
Male FV-user	3.86 (.050)		16.89 (<.001*)	0.67 [.5681]	9.04 (.003*)	.82 [.7293]
Low SES ^a (lowest 20%)	5.13 (.024*)	.79 [.6597]	4.54 (.033*)	0.81 [.6798]	0.10 (.754)	
Accessibility need	5.09 (.024*)	1.80 [1.07-3.03]	14.28 (<.001*)	2.66 [1.57-4.49]	2.93 (.087)	
Psychosocial Characteristics						
Mental health issues	0.70 (.404)		0.03 (.854)		1.03 (.310)	
Substance abuse issues	114.27 (<.001*)	0.23 [.1731]	181.27 (<.001*)	0.17 [.1323]	20.68 (<.001*)	0.75 [.6685]
Unemployment/school truancy	30.30 (<.001*)	0.57 [.4669]	25.97 (<.001*)	0.60 [.4973]	0.80 (.371)	
Ever victimised in a FV incident	9.77 (.002*)	0.73 [.6189]	17.99 (<.001*)	0.67 [.5581]	2.42 (.119)	
Early FV victimisation (0-11 years)	41.66 (<.001*)	2.30 [1.78-2.98]	183.88 (<.001*)	6.19 [4.62-8.29]	59.14 (<.001*)	2.69 [2.07-3.49]
Family Violence Characteristics						
Female victim	5.61 (.018*)	1.30 [1.05-1.63]	10.84 (<.001*)	1.43 [1.15-1.77]	1.78 (.182)	
FV-user engaged in CPA	42.17 (<.001*)	1.89 [1.56-2.30]	377.46 (<.001*)	6.01 [4.95-7.29]	328.27 (<.001*)	3.18 [2.80-3.61]
FV-user engaged in IPA	126.40 (<.001*)	0.14 [.0921]	486.36 (<.001*)	0.04 [.0306]	356.56 (<.001*)	0.30 [.2634]
FV-user engaged in recidivism	1.77 (.184)		0.00 (.955)		4.64 (.031)	

Note. FV = family violence. df=1. *Statistically significant after Holm-Bonferroni correction. ^aSES = socioeconomic status

Figure 1

Time to family violence recidivism for early adolescent (10-14 years), late adolescent (15-19 years), and young adult (20-24 years) FV-users

over a six-month period



Chapter Six: Study Two

6.1. Rationale for Study Two

The second paper of this thesis is provided in Chapter Six. There is currently an absence of tools designed to assess the risk of family violence recidivism among young people who have come to the attention of police for using family violence. The utility of the Victoria Police Screening Assessment for Family Violence Risk (VP-SAFvR) has previously been found to be effective for both adults (aged 18+) and young people aged under 18 years (McEwan et al., 2019; Spivak et al., 2021). However, the utility of the VP-SAFvR for young people aged 10-24 years according to relational dyad of abuse (e.g. child-to-parent abuse, sibling abuse, intimate partner abuse), gender, and age cohort (10-14 years, 15-19 years, and 20-24 years) has not been examined. Therefore, the third paper will examine the discriminative and predictive validity of the VP-SAFvR for youth aged 10-24 years according to relational dyad of abuse recidivism among young people reported to police for using family violence. This paper addressed the second overarching thesis aim of advancing understanding of family violence.

The second study, titled 'Assessing risk of family violence by young people: Identifying recidivism base rates and the validity of the VP-SAFvR for youth' was submitted to Criminal Justice and Behaviour and a 'revise and resubmit' with minor changes decision was returned. The requested changes were made, and the paper was resubmitted on 26th October 2022. At the time of thesis submission, the paper remains under review. Criminal Justice and Behaviour is an interdisciplinary peer-reviewed journal that disseminates research which explores the psychological and behavioural facets of the juvenile and criminal justice systems. The current impact factor of Criminal Justice and Behaviour is 2.80 (Clarivate

Analytics, 2020). The 'Author Indication Form' detailing the nature and extent of the candidate and co-authors' contributions to this published study is included in Appendix I.

Assessing Risk of Family Violence by Young People: Identifying Recidivism Base Rates and the Validity of the VP-SAFvR for Youth

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Correspondence concerning this article should be addressed to Abigail T. Sheed, Centre for Forensic Behavioural Science, Swinburne University of Technology, Alphington, Victoria, Australia. Email: <u>asheed@swin.edu.au</u>. We have no conflicts of interest to disclose. This study involves secondary analysis of data from a larger project, as described in the method section. The specific ideas and data analyses presented in this work have not previously been published or presented.

Abstract

Police-reported incidents of youth family violence have been increasing in frequency yet limited research exists about how best to risk assess this cohort. The present study examined the validity of the Victoria Police Screening Assessment for Family Violence Risk (VP-SAFvR) for Australian youth aged 10–24 years (n = 4999) reported to police for using family violence. The 6-month base rate of family violence recidivism was 24.24% for samedyad recidivism and 35.31% for any-dyad recidivism. The VP-SAFvR demonstrated moderate discriminative validity (Area Under the Curve [AUC] = .65) for the total sample and comparable discriminative validity across age (AUCs = .64–.67), gender (AUCs = .63– .65), and relationship (i.e., child-to-parent abuse, sibling abuse, intimate partner abuse; AUCs = .62–.65). Predictive validity was adequate at a threshold score of four for 10-24-year-olds and most subgroups. Results demonstrate the utility of a structured risk triage tool for youth family violence.

Keywords: family violence, youth, child-to-parent abuse, sibling abuse, intimate partner abuse, risk assessment

Assessing Risk of Family Violence by Young People: Identifying Recidivism Base Rates and the Validity of the VP-SAFvR for Youth

Incidents of police-reported youth family violence have increased in recent years (Phillips & McGuinness, 2020; Walker & Woerner, 2018), yet abusive behaviour by young people remains significantly under-reported (Fitz-Gibbon et al., 2018; Kuay & Towl, 2021). While the negative effects of youth family violence have been well documented internationally (Ackard et al., 2007; Farrington & Ttofi, 2021; Fitz-Gibbon et al., 2018; Kuay & Towl, 2021), there is relatively little research examining how best to risk assess and manage young people who engage in abusive behaviour within the family context.

Broad definitions of family violence are increasingly used across various jurisdictions (Jolliffe Simpson et al., 2021; Miles & Condry, 2016; Spivak et al., 2021) in recognition of the diverse behaviours which can be abusive and the diverse relationships in which such behaviour can be enacted. Family violence includes abuse toward relatives (e.g., parents, siblings, other relatives) and abusive behaviour towards dating or intimate partners, encompassing both physical (e.g., physical assault, sexual assault, etc.) and non-physical (e.g., psychological abuse, economic abuse) behaviour. Many jurisdictions recognise the capacity for family violence to include behaviour that is not associated with criminal charges (Jolliffe Simpson et al., 2021; Miles & Condry, 2016; Spivak et al., 2021). For example, in the Australian state of Victoria, family violence is defined broadly in the Family Violence Protection Act (2008) as involving physical, sexual, or a variety of psychological forms of abuse. Only half (50.8%) of all police recorded family violence incidents in Victoria between 2020-21 involved a criminal offence for which charges were laid (Crime Statistics Agency, 2021).

Children and young people have consistently been recognised within the family violence literature as some of the most vulnerable victims of violence and abuse, and often

experience multiple forms of abuse concurrently (AIHW, 2018; Farrington & Ttofi, 2021). Yet, there has traditionally been a reticence to acknowledge the propensity for young people to also engage in abusive behaviour themselves. This reticence has often meant family violence behaviour by youth has been subsumed under the banner of problematic adolescent behaviour, leading to a relative lack of literature directly examining this phenomenon (Boxall & Sabol, 2021). However, research on youth family violence is growing, with increased recognition of its associated harms for both the young person and victim, including significant physical injury (Elliott et al., 2020; Fitz-Gibbon et al., 2018), poor mental health outcomes (Ackard et al., 2007; Elliott et al., 2020), and the continued use of violence into adult relationships (Johnson et al., 2015; Kaufman-Parks et al., 2017). Still, there remains an absence of appropriately validated risk assessment tools for young people. The relative absence of research on this topic contrasts with the broader literature on adult and youth violence generally, in which a survey distributed across six continents found mental health professionals used over 400 tools to assess, manage, and monitor risk of violence (Singh et al., 2014). Of those few studies which have examined risk assessment among young people who use family violence, research has been sparse and primarily been limited to intimate partner abuse (Bowen & Walker, 2015; Shaffer et al., 2022).

Risk Assessment Tools for Young People who use Family Violence

Given the lack of robust evidence and appropriately validated risk assessment tools specific to youth family violence, young people are typically assessed using more general risk assessment protocols (Shaffer et al., 2022). While tools like the Structured Assessment for Violence Risk in Youth (SAVRY; Borum et al., 2006) and the Youth Level of Service/Case Management Inventory (YLS/CMI; Hoge & Andrews, 2006, 2011) are often employed to assess young people who engage in violent behaviour, they have been shown to be poor predictors of intimate partner abuse perpetration among youth aged 12–18 years (Shaffer et

al., 2022). Though the findings by Shaffer and colleagues (2022) were limited by small sample size (n = 156) and low base rate of intimate partner abuse (11.5%), they raise questions regarding the applicability of these general tools for use with young people who use other relational forms of family violence, including whether they assess for key risk factors for family violence recidivism.

Likewise, there have been suggestions that adult family violence tools like the Spousal Assault Risk Assessment (SARA-V³; Kropp & Hart, 2015) and the Brief Spousal Assault Form for the Evaluation of Risk (B-SAFER; Kropp et al., 2005) may be useful for young people who engage in intimate partner abuse (Bowen & Walker, 2015). Although validation of these tools for young people is limited, Shaffer et al. (2022) found that several items of the SARA-V3 were applicable for use with adolescents and proposed revisions to other items to make them more relevant for this cohort; this adaption of the SARA-V³ (i.e., Youth Intimate Partner Assessment Guide) is yet to be validated.

Several family violence risk tools used by police, including the Domestic Violence Screening Instrument (DVSI-R; Williams & Grant, 2006), the Dynamic Risk Assessment (DYRA; Bissielo & Knight, 2016) and the Static Assessment of Family Violence Recidivism (SAFVR; Bissielo & Knight, 2016), have been validated for use with those under 18 years. However, whether these tools are valid across various youth developmental periods, relationships of abuse, and gender has not yet been explored. Validation studies of risk assessment tools typically view young people as a homogenous group, with limited consideration given to the ongoing developmental changes experienced by young people throughout adolescence and young adulthood.

The Child-to-Parent Violence Risk Assessment tool (CPVR) is an instrument that has been specifically designed for use with young people who engage in child-to-parent abuse (Loinaz et al., 2017). However, it was not created for the purpose of examining risk of

recidivism and the exact nature of risk being assessed remains unclear (Loinaz et al., 2017; Loinaz & de Sousa 2019). Loinaz and de Sousa (2019) examined the risk and protective factor profiles among clinical (n = 61) and judicial (n = 30) samples of young people who are known to have engaged in child-to-parent violence, finding the CPVR tool to effectively classify young people who engaged in different forms of child-to-parent violence (AUC = .83). However, the CPVR has only been used to retrospectively classify young people already known to have engaged in child-to-parent violence, with no studies currently available suggesting it can discriminate the risk of future family violence.

Issues with the Current State of Youth Family Violence Risk Assessment Research

The small but growing literature examining risk assessment and management of young people who use family violence remains hampered by several factors, three of which are outlined here. First, there has been a tendency to focus on one relational form of violence (i.e. child-to-parent abuse, sibling abuse, intimate partner abuse; Contreras & Cano, 2014; Johnson et al., 2015; Elliott et al., 2020), rather than broadening the scope to include the many relationships within which violence can occur. This 'silo effect' has contributed to poor understanding of the broader phenomenon of youth family violence, and impedes translation of research into practice given the propensity for young people to generalise their violence toward multiple family members (Boxall & Sabol, 2021; Kuay & Towl, 2021) and engage in other criminal behaviour (Freeman, 2018; Phillips, & McGuinness, 2020).

Second, research on family violence among young people has primarily explored the phenomenon within adolescents (Boxall, & Sabol, 2021; Freeman, 2018; Shaffer et al., 2022), with few studies overlaying a youth developmental lens that examines the use of family violence into young adulthood. Increasingly, researchers, organisations and service providers are recognising the need for a developmentally informed approach for young

people aged up to 25 years old given neuroscientific and psychological evidence of delayed brain maturation into the twenties (Cohen et al., 2016; Scott et al., 2016). Indeed, many services for youth provide support up to the age of 25 years (Royal Commission into Family Violence, 2016; McGorry et al., 2022), suggesting the need to consider both adolescents and young adults within the youth family violence literature to enhance translatability of research. Best-practice guidelines regarding risk assessment and management of young people highlight the importance of understanding age-related base rates of general and specific forms of violence (Borum et al., 2006), and recognising young people as a heterogeneous cohort requiring nuanced and developmentally informed research (Shaffer-McCuish, 2020).

Finally, youth family violence research has been primarily descriptive (Boxall & Sabol, 2021; Simmons et al., 2018), with little consideration of applying knowledge to the processes of risk assessment, management and therapeutic intervention. Although the extant literature has provided an understanding of potential risk and protective factors that may contribute to youth family violence, additional research in applied settings is needed, such as the validation of risk tools for use with young people reported to police for engaging in abusive behaviour.

The Present Study

The present study aimed to address the abovementioned gaps by exploring the discriminative and predictive validity of an existing family violence risk assessment tool for use with young people aged 10-24 years. The Victoria Police Screening Assessment for Family Violence Risk (VP-SAFvR; McEwan et al., 2019) is an actuarial screening instrument developed in the Australian state of Victoria designed to assess risk of any form of future police-reported family violence within the same family. Prior work found the tool had moderate discriminative validity (AUC = .66) in adult field trials, however, classification accuracy was reduced for young people under 18 years, resulting in the suggested application

of a lower cut-off score to improve predictive capacity for this group (McEwan et al., 2019; Spivak et al., 2021).

The present study had five key objectives: 1) to identify the base rate of family violence recidivism among Australian youth aged 10–24 years old; 2) to determine whether the VP-SAFvR is valid for use with youth aged 10–24 years of age, both for recidivism within the same dyad and recidivism within any relational dyad; 3) to explore whether the discriminative and predictive validity of the tool differs according to the young person's age; 4) to determine whether the VP-SAFvR is valid for male and female youth; and 5) to assess the tool's discriminative and predictive validity according to the relational dyad of abuse (i.e. child-to-parent abuse, intimate partner abuse, sibling abuse).

Method

Design

The study used a prospective follow-up design using data from Victoria Police administrative databases. Victoria Police are responsible for all policing in the Australian state of Victoria (population 6.63 million at the time of the study, 67% of whom live in the state's capital city of Melbourne; Australian Bureau of Statistics, 2021). Family violenceusers were identified at the time of their index incident and their data were linked to any family violence incidents in which they were involved over the subsequent six months.

Family Violence Definitions

The present study uses the terms *family violence-user* and *young person who uses family violence* in recognition of the need to consider young people as more than their behaviour, and to encourage a person-centred approach to conceptualising youth family violence. The term *respondent*, which is police parlance for those who engage in family violence, is not a widely recognised term outside policing agencies and so was not used here.

Victoria Police respond to all reports of family violence in the Australian state of Victoria. Police record such incidents as a matter of policy when they judge that the incident has involved family violence as defined in the Victorian Family Violence Protection Act 2008. The Act defines family violence as:

Behaviour by a person towards a family member of that person if that behaviour is physically or sexually abusive; or is emotionally or psychologically abusive; or is economically abusive; or is threatening; or coercive; or in any other way controls or dominates the family member and causes that family member to fear for the safety and wellbeing of that family member or another person. (Family Violence Protection Act, 2008, s.5)

Under the Act, the term *family members* refers to relatives, intimate partners, children who normally reside with the victim and/or family violence-user, as well as "any other person whom the relevant person regards or regarded as being like a family member" (Family Violence Protection Act, 2008, s.8), such as foster carers or the carer of a person with a disability. Some forms of family violence may involve chargeable criminal offences (e.g., assault or threats), however many do not (e.g., psychological abuse, economic abuse, coercion).

The age-based analyses utilised developmental periods which were derived from the World Health Organisation (WHO, 2021). The WHO defines 'young people' as those aged 10-24 years and identifies those aged 10-14 years as being in a period of 'early adolescence', while those aged 15-19 years are in a period identified as 'late adolescence' (WHO, 2021). 'Young adulthood' included those aged 20-24 years (WHO, 2021).

Data Source

All information pertaining to family violence incidents is recorded by police using family violence reports and is stored on Victoria Police's Law Enforcement Assistance

Program (LEAP) database. The LEAP program is used by Victoria Police to record all known police involvements and offences (both family violence- and non-family violence-related) for an individual, regardless of outcome (e.g., arrested, charged, convicted).

When responding to a family violence incident, responding police officers use family violence reports to record characteristics of the incident, the victim, the person using family violence, and relationship between the victim and family violence-user. The14 items of the VP-SAFvR are contained within the family violence report. All available data from these family violence reports involving a unique relationship dyad during the index period was linked to any future family violence incidents in which the young person was the family violence-user in the subsequent six-month period. Young family violence users and victims were matched across time using unique police identifiers, which were assigned at the time of the index family violence incident.

Sample

This study involved the analysis of all police-reported incidents of family violence in Victoria during the four-month period between 1 September and 31 December 2019 (index period) in which a young person aged 10 to 24 (inclusive) was listed as the user of family violence (N = 5014). Given the focus of this study is to validate the VP-SAFvR for use with youth aged 10-24 years, young people were removed from the sample if VP-SAFvR data was missing (15 cases, 0.03%). This resulted in a total of 4999 young family violence-users being included in the sample.

The sample was drawn from a wider population of all 24,419 family violence reports recorded by police during the same period, of which 358 (1.50%) had missing age and so were excluded from selection for this sample. The dyadic relationship between the young person and victim was categorised into mutually exclusive groups according to the initial reported incident during the index period. Specifically, young people were identified as

engaging in child-to-parent abuse, intimate partner abuse, sibling abuse, child maltreatment, or other family abuse (e.g., grandparents, cousins, aunts, uncles, and carers).

Over two thirds of the young family violence-users were male (n = 3519, 70.42%) while over one quarter were female (n = 1478, 29.57%). There were two cases (.04%) in which the sex of the young family violence user was not specified. The mean age of young people was 19.19 (SD = 3.51) years at the time of the index incident. These characteristics are broadly consistent with previous research examining youth family violence incidents among police-reported samples (Boxall, & Sabol, 2021; Phillips, & McGuinness, 2020). There is a slightly higher percentage of male family violence-users, which is likely reflective of the inclusion of young adults in the present sample, as research has shown there to be a higher proportion of males among older youth and adult family violence-users (Phillips, & McGuinness, 2020; Simmons et al., 2018).

Measures

Victoria Police Screening Assessment for Family Violence Risk (VP-SAFvR)

The VP-SAFvR is an actuarial risk assessment tool developed from a random sample of 24,000 family violence incidents recorded by police in the Australian state of Victoria between July 2013 and June 2014 (McEwan et al., 2019). The VP-SAFvR was developed to support responding police officers at the time of a family violence incident to identify cases requiring a more thorough risk assessment and potential risk management by specialist officers. The screening aim of the VP-SAFvR is to correctly detect "as many cases as possible where family violence is reported again (high sensitivity), while accurately excluding as many cases as possible that have no further reports (at least moderate specificity), so as to ensure that police resources are used in the most effective way" (McEwan et al., 2019, p. 593).

The tool consists of 14 risk factors. Each risk factor is recorded as absent (scored 0) or present, with a weighted score of 1 or 2 assigned based on the strength of the relationship between the variable and its capacity to predict family violence recidivism (McEwan et al., 2019; Spivak et al., 2021). The tool has demonstrated moderate discriminative validity (AUC = .66) in adult samples, however both discriminative validity (AUC = .61) and classification accuracy were somewhat reduced among those aged under 18 years (McEwan et al., 2019).

Family Violence Recidivism

The VP-SAFvR was developed and is used to assess the likelihood of a subsequent family violence incident occurring within the same dyad or involving a related child (McEwan et al., 2019), making it a situationally-specific risk assessment instrument. However, the present study examined the capacity of the VP-SAFvR to assess the likelihood of a subsequent family violence incident within both the same relationship dyad *and* any relationship dyad. This is due to research showing that a significant minority of young people engage in abusive behaviour across multiple relationships (Boxall & Sabol., 2021; Kuay & Towl, 2021).

Given this, *same dyad* recidivism was defined as any additional police-reported family violence incident within the six-month follow-up period involving (a) the same two people (irrespective of their role in the subsequent incident) and/or (b) the index family violence user and a related child (the original intent of the VP-SAFvR). *Any dyad* recidivism was defined as any new family violence report involving the index young person as a family violence user again, toward any victim, during the six-month follow-up period. These two forms of recidivism are not mutually exclusive.

A priori decisions were made to define recidivism as any future police-reported incident of family violence rather than relying on police charges. This decision was made as charging patterns may change over time and because many forms of family violence do not

have an accompanying criminal offence. This method is consistent with how the VP-SAFvR was developed (McEwan et al., 2019).

Procedure

Data were extracted from the Law Enforcement Assistance Program (LEAP) by Victoria Police staff and provided to researchers in de-identified form. All police-recorded data from the first family violence report involving a unique dyad during the index period was collected, along with demographic data relating to sex and age for each victim and young family violence-user. Family violence recidivism was determined using a six-month followup period.

The location (metropolitan and rural/regional) of the index incident was identified using the ABS (2018) data. This involved identifying the location of the index incident according to one of the remoteness area classifications (i.e. major cities of Australia, inner regional Australia, outer regional Australia, remote Australia, very remote Australia) using the postcode of the index family violence incident recorded by police. Those incidents occurring in a postcode classified as 'major cities of Australia' were coded as metropolitan, while incidents occurring in any one of the four other classifications were identified as rural/regional.

Ethics

The study was approved by the *Blind for Review* and the *Blind for Review* Human Research Ethics Committee.

Data Analysis

Data were analysed using IBM SPSS Statistics, version 28 (2020). Area Under the Curve (AUC) and associated test statistics (sensitivity, specificity, positive predictive value [PPV] and negative predictive value [NPV]) were used to examine the validity of the VP-SAFvR for use with young people. AUC and test statistics were further used to examine

whether the validity of the VP-SAFvR differed according to sex (male or female), age (10-14 years, 15-19 years, 20-24 years) and the relationship of abuse (i.e. child-to-parent abuse, intimate partner abuse, and sibling abuse) a young person engaged in.

These statistics were examined according to VP-SAFvR threshold scores of three and four because the tool typically employs a threshold score of four for adults, although previous research suggests a threshold score of three may be more appropriate for people under 18 years (McEwan et al., 2019; Spivak et al., 2021). Given this study is examining both adolescents and young adults, both thresholds were examined. Other family abuse (i.e. abuse toward grandparents, uncles, cousins, etc.) not explicitly examined beyond descriptive analyses (Table 1) as this form of abuse made up less than one in ten incidents. The analyses were run separately for both same-dyad recidivism and any-dyad recidivism. Results of same-dyad recidivism were included in the results section of this paper, while the tables generated for any-dyad recidivism are provided in supplemental material, with the results briefly discussed in the main text.

The AUC is used to represent the probability that a randomly selected recidivist would receive a higher score on the VP-SAFvR than a randomly selected non-recidivist individual. An AUC of 0.5 indicates that the tool does not discriminate between recidivists and non-recidivists. An AUC equal to or exceeding .71 is considered large in violence risk assessment literature (Rice & Harris, 2005).

Results

Descriptive Analyses

Table 1 shows the demographic characteristics of the total sample, including the dyadic relationship between the victim and young family violence-user at the index incident. During the six-month follow-up period, 24.24% of young people were involved in a subsequent family violence incident within the same dyad, while 35.31% used family violence in a

subsequent incident within any dyad. Most young people were male and were abusive toward a female victim at the index incident. Child-to-parent abuse was the most common form of abuse identified at the index incident, followed by intimate partner abuse and sibling abuse.

Validity of VP-SAFvR in the Full Sample

Table 2 provides the frequency of the VP-SAFvR items and whether they are associated with same-dyad and any-dyad recidivism. Results suggest that all but four of the VP-SAFvR items are significantly associated with same-dyad recidivism. The presence of children at the index incident, recent or imminent separation, and alcohol or other drug use around the time of the index incident by the victim or young person were not associated with same-dyad recidivism among young people aged 10-24 years.

Table 3 shows same-dyad recidivism aggregated according to VP-SAFvR score category. There was a strong positive correlation (tau-b = .82, p < .001) between score categories and the presence of same-dyad family violence recidivism.

Classification accuracy of the VP-SAFvR according to same-dyad recidivism for young people aged 10-24 years at each threshold score of the instrument is outlined in Table 4. The optimal thresholds for classification accuracy were selected by maximising sensitivity and specificity, with more weight placed on specificity given the tool's focus on triage (McEwan et al., 2019). This resulted in threshold scores selected at three and four. The relative risk of same-dyad recidivism increases with each successive increase in threshold score.

Classification accuracy at threshold scores of three and four, as well as discriminative validity of the VP-SAFvR, are further explored for the total sample in Table 5. While a threshold score of three provided high sensitivity for the total sample (aged 10-24 years), the specificity was reduced, whereas a threshold score of four provided high sensitivity and moderate specificity. Here the threshold score of four identified 75% of cases that reported family violence to the police during the follow-up period. Specificity for the total sample

increased to .45 when a threshold of four was applied, indicating that 45% of those who did not reoffend were below the threshold. The positive predictive value of .30 indicates that 30% of those above the threshold were in subsequent same-dyad police-reported family violence incidents, while the negative predictive value of .85 indicates that 85% of those below the threshold score of four were not involved in same-dyad recidivism.

The discriminative validity of the VP-SAFvR was explored for same-dyad recidivism using AUC statistics. The tool displayed a moderate level of discriminative validity (AUC = .65) for those aged 10-24 years (Rice & Harris, 2005). This suggests there was a 65% probability that a randomly selected recidivist from the sample would score higher than a randomly selected non-recidivist on the VP-SAFvR.

Validity of VP-SAFvR According to Age

Table 5 provides discriminative validity and classification statistics for age-based subsamples at threshold scores of three and four. A threshold score of four provided high sensitivity and moderate specificity for young people aged 15-19 years and 20-24 years. For those aged 10-14 years, a threshold score of three provided high sensitivity and moderate specificity, whereas a score of four provided poor sensitivity and moderate specificity. The tool demonstrated moderate discriminative validity across all age groups (AUCs = .64-.67). The AUCs and 95% confidence intervals for each of the age groups are presented in Table 5.

Validity of the VP-SAFvR by Sex and Dyadic Relationship

Table 6 shows the classification-based statistics (sensitivity, specificity, PPV, NPV, and relative risk ratios) for sex and the three relational forms of abuse explored here: child-to-parent abuse, intimate partner abuse, and sibling abuse. The tool demonstrated moderate discriminative validity for males (AUC = .65; 95% CI [.63-.67]) and females (AUC = .63, 95% CI [.60-.66]). At a threshold score of four, the tool demonstrated high sensitivity and moderate specificity for both males and females.

The VP-SAFvR demonstrated comparable discriminative validity (AUCs = .62 - .65) across the three relational forms of abuse. The AUC values and 95% confidence intervals for each of these forms of abuse are provided in Table 6. For child-to-parent abuse and intimate partner abuse, a threshold score of four identified 73-79% of families reporting subsequent family violence (with 39-45% of those who were not involved in a subsequent incident below threshold), indicating high sensitivity and moderate specificity. For sibling abuse, a threshold score of three identified 77% of cases that reported subsequent family violence (39% of those who were not involved in a subsequent family violence in a subsequent family violence (39% of those who were not involved in a subsequent family violence (39% of those who were not involved in a subsequent family violence (39% of those who were not involved in a subsequent family violence (39% of those who were not involved in a subsequent family violence (39% of those who were not involved in a subsequent family violence (39% of those who were not involved in a subsequent family violence (39% of those who were not involved in a subsequent incident were below the threshold), indicating high sensitivity and moderate specificity. Positive predictive value and NPV remained relatively consistent across both thresholds.

Validity of the V-SAFvR for Any-Dyad Recidivism

The full results for any-dyad recidivism can be found in the supplemental materials. There was a strong positive correlation (tau-b = .85, p < .001) between VP-SAFvR score categories and rates of any-dyad family violence recidivism within each category.

The discriminative validity of the VP-SAFvR for young people aged 10-24 years for any-dyad recidivism displayed moderate discriminative capacity (AUC = .65). High sensitivity (.74) and moderate specificity (.49) was reached at a threshold score of 4. Discriminative validity did not vary greatly according to age (AUCs = .65-.67). High sensitivity and moderate specificity were demonstrated at a threshold score of four for those aged 15-19 years and 20-24 years, while those aged 10-14 years displayed high sensitivity and moderate specificity at a threshold score of three.

Discussion

The present study explored the base rate of family violence recidivism and the discriminative and predictive validity of the VP-SAFvR for Australian young people who use family violence. To our knowledge, this is the first published study validating a tool

examining family violence recidivism among young people, with reference to key developmental periods, gender, and relationships of abuse. The VP-SAFvR demonstrated adequate discriminative and predictive validity for young people aged 10-24 years, as well as across age groups, gender, and relational dyads of abuse (child-to-parent abuse, intimate partner abuse, sibling abuse). The use of a threshold score of four was found to be appropriate for those in the 15-19-year-old and 20–24-year-old subsamples, while lowering the threshold to three for those aged 10-14 years improved performance to a level that was analogous to those aged 15 years and over.

Family Violence Recidivism

This study used population-based data, making it possible to ascertain the base rate of recidivism for youth re-reported to police within six months following their index family violence incident. The proportion of young people aged 10-24 years who engaged in family violence recidivism in the six months after the index incident was 24.24% for same-dyad recidivism and 35.31% for any-dyad recidivism. The same-dyad recidivism results presented here are broadly consistent with family violence recidivism rates among Australian adults (23%; Morgan et al., 2018), however results for any-dyad recidivism is considerably higher. This may be reflective of family violence use peaking in late adolescence and young adulthood (Snyder & McCurley, 2008). Same-dyad recidivism was highest among young people aged 10-14 years (26.81%) compared to those aged 15-19 years (24.69%) and 20-24 years (37.17%) compared to those aged 10-14 years (34.23%) and 20-24 years (34.18%; see supplementary material).

The somewhat elevated rate of same-dyad recidivism among the 10-14-year-old cohort may reflect the tendency for early adolescents (10-14 years) to be more embedded within the family system and less likely to be in an intimate partnership, resulting in a comparatively elevated rate of same-dyad recidivism, but not necessarily any-dyad recidivism. In contrast,

older adolescents and young adults display expanded peer and extrafamilial networks, including intimate partnerships (Giordano et al., 2003). The confluence of this relational network expansion and elevated levels of antisociality and abusive behaviour during adolescence (Hirschi, 1969; Johnson et al., 2015) may partly account for older adolescents' tendency to engage in family violence across multiple relationships, rather than the same dyad specifically.

Discriminative Validity of the VP-SAFvR

The VP-SAFvR demonstrated moderate discriminative validity for both same-dyad (AUC = .65; Rice & Harris, 2005) and any-dyad (AUC = .65) recidivism for youth aged 10-24 years, with a strong positive correlation observed between the VP-SAFvR score categories and rates of recidivism within each category. The tool demonstrated adequate classification accuracy at a threshold score of four for 10-24-year-olds. At this threshold, the VP-SAFvR correctly captured three quarters of youth who engaged in family violence recidivism.

Previous validation studies of the VP-SAFvR for those aged under 18 years suggested the tool displayed small-to-moderate discriminative validity (AUCs = .61-.62; McEwan et al., 2019; Spivak et al., 2021), however results of the present study indicate moderate discriminative capacity (AUC = .65) for the same age group. The slight difference in findings is likely due to several factors, including the present study's larger sample size, use of statewide data, and correct administration of the tool. The VP-SAFvR was not administered as intended in the development and validation study conducted by McEwan et al. (2019), with data being extracted from pre-existing family violence reports to create and test the validity of the tool. Similarly, the results presented by Spivak and colleagues (2021) were derived from a field trial across two metropolitan police divisions, whereas data for the present study represented the full state-wide sample of family violence reports. These factors may all

contribute to the differences observed between the findings of the present study and preexisting research relating to the validity of the VP-SAFvR.

In addition to the tool's moderate discriminative validity for the broader sample of 10-24-year-olds, the VP-SAFvR total score performed comparably across age groups (AUCs = .64-.67), dyad types (AUCs = .62-.65) and sex (AUCs = .63-.65) for same-dyad recidivism. Similar results were observed for any-dyad recidivism, with results provided in the supplementary material. This suggests the tool demonstrates a moderate capacity to discriminate between a randomly selected recidivist and non-recidivist young person regardless of age, gender, or relationship in which the abuse occurred. Interestingly, the tool displayed a large discriminative capacity for sibling abuse when used to assess recidivism within any dyad, but only a moderate capacity for same-dyad recidivism. One possible explanation for this is that sibling abuse is significantly under-reported (Fitz-Gibbon et al., 2018; Elliott et al., 2020) and so those who are reported to police for such behaviour may be more likely to be reported for family violence in other relationships. It is possible that the substantial rates of under-reporting of this form of abuse impede the tool's capacity to accurately identify future sibling abuse. More research is required to examine this hypothesis.

An additional finding of note is that, while the literature has typically explored youth family violence separately based on the nature of the abusive relationship (i.e., child-to-parent abuse, intimate partner abuse, sibling abuse), the results presented here suggest the same triage tool demonstrates acceptable discriminative validity for family violence recidivism across the examined dyads and across key developmental stages. This may indicate a degree of commonality in the underlying risk factors influencing the use of family violence in different relationships and, as such, indicates the need to consider the different relational dyads concurrently.

Predictive Validity of the VP-SAFvR

Exploring the predictive validity of a tool requires an understanding of the inherent trade-off between sensitivity and specificity. While improvements to sensitivity (i.e., true positive rate) are viewed positively when developing a screening or risk assessment tool, the choice of implementing a specified threshold must always consider the need to balance specificity and sensitivity, with improvements in one often leading to reductions in the other. Given this, the optimal balance between sensitivity and specificity of an instrument must be considered in relation to the context in which it is employed, as well as the potential consequences of its use (Messing & Campbell, 2016; Sheed et al., in press). As noted by McEwan et al. (2019), there is a need to maintain a moderate level of specificity due to the screening nature of the VP-SAFvR and the resource implications if a high false positive rate were to be employed. The authors noted that a reduction in specificity would result in an over-referral of victims and perpetrators to specialist police and family violence services, and lead to potentially unwarranted and invasive perpetrator-focused interventions by police.

Given this, the VP-SAFvR was developed to prioritise sensitivity while maintaining sufficient specificity to screen out as many non-recidivists as possible (McEwan et al., 2019). Accordingly, the present study determined the optimal decision-making threshold by identifying the threshold score at which the maximum number of recidivist and non-recidivist youth were correctly classified. Based on these criteria, a threshold score of four was found to be applicable to the broader sample of young people aged 10-24 years. This threshold was similarly applicable for both male and female young people, as well as those who engaged in child-to-parent abuse and intimate partner abuse, however a threshold score of three was found to be more applicable for sibling abuse.

Previous validation studies of the VP-SAFvR have examined the predictive validity of the tool for an adolescent subsample (those under 18 years) and suggested a threshold score of three may be more appropriate for this age group than the score of four applied to adult

samples (McEwan et al., 2019; Spivak et al., 2021). The results of the present study suggest that sensitivity (i.e. proportion of those accurately identified as recidivists) is improved from moderate (at a threshold score of four) to high at a threshold score of three. Specificity (i.e. proportion of those accurately identified as non-recidivists) was reduced somewhat at a threshold of three, however the tool still managed to correctly screen out 42% of non-recidivists. Given the screening nature of the VP-SAFvR, the high sensitivity and moderate specificity is acceptable, leading our initial findings to concur with those of McEwan et al. (2019) and Spivak et al. (2021) that a threshold score of three is appropriate for the cohort of family violence-users aged 10-18 years.

However, when a more developmentally nuanced lens was applied using age-based subsamples – 10-14 years, 15-19 years, and 20-24 years – only those aged 10-14 years appeared to require a reduced risk threshold (i.e. score of three). The tool demonstrated improved classification accuracy for those aged 10-14 years at a threshold score of three, demonstrating high sensitivity and moderate specificity. In contrast, the VP-SAFvR performed acceptably at the standard threshold score of four for those aged 15-19 years and 20-24 years, showing high sensitivity and moderate specificity. These results highlight the need for future research to consider the stages of youth development when validating risk assessment tools for young people, rather than examining them as a homogenous group.

Study Limitations

The present study is limited in several respects. The study used a 6-month follow-up period to examine the capacity of the VP-SAFvR to predict family violence recidivism. While previous research has demonstrated most family violence recidivism occurs within this timeframe (Morgan et al., 2018), results should not be extrapolated beyond 6 months.

The true base rates of recidivism among young people who use family violence may be understated within the current study given the involvement of police. Intervention by police

and other service agencies would likely have influenced family violence recidivism, however the effects of such involvement could not be examined and therefore represent a limitation of the analyses. While this is an important limitation, it does not significantly impact upon the significance of these results for police as the VP-SAFvR is employed as a central part of Victoria Police's response to family violence and, as such, is designed and validated for use in situations where intervention by police and other agencies is warranted.

The VP-SAFvR could not be validated for Aboriginal and/or Torres Strait Islander youth or culturally and linguistically diverse communities. Unfortunately, there is no reliable way for Victoria Police to ascertain the ethnicity of individuals involved in a family violence incident (McEwan et al., 2019). The validation of risk tools for use with such communities is an important avenue for future research.

Future Directions and Conclusion

The present study is one of very few which has validated a family violence screening instrument or risk assessment tool for use with young people. To the authors' knowledge, the study is also the first to provide multiple classification statistics when examining the discriminative and predictive capacity of a risk tool for use with young people who use family violence. The employment of classification statistics (AUC, specificity, sensitivity, PPV and NPV) should be prioritised in future research to ensure transparency regarding how classification thresholds are decided, and the consequent trade-offs that are made in relation to false positive and false negative rates.

Age-based subsamples were examined to consider the potential developmental nuances involved in assessing family violence risk among youth. These comparisons showed that those aged 10-14 years may have a somewhat different risk profile from their older counterparts. The relevance of gender and relational dyad of abuse have similarly been considered in the present assessment of risk. The literature base would benefit from

validation of risk assessment tools for Indigenous and culturally and linguistically diverse young people and further exploration of whether additional risk or protective factors may enhance the risk assessment and management process. Similarly, future research should endeavour to include multiple relational dyads of abuse concurrently given the interconnectedness of different forms of violence (Farrington & Ttofi, 2021).

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Table 1

Demographic characteristics of total sample

		N (%)
N		4999
Characteristics of young family violence-user		
Male Sex ^a	Male	3519 (70.39)
Mean age (SD)		19.19 (3.51)
Age group	10-14 years	593 (11.86)
	15-19 years	1875 (37.51)
	20-24 years	2531 (50.63)
Location of incident	Metropolitan	3341 (66.63)
	Rural/regional	1673 (33.37)
Relationship of abuse at index incident	Child-to-parent	2026 (40.53)
	abuse	
	Intimate partner	1907 (38.15)
	abuse	
	Sibling abuse	580 (11.60)
	Other family abuse	486 (9.72)
Same sex relationship with intimate partner abuse victim		78 (1.56)
Recidivism	Same dyad	1212 (24.24)
	Any dyad	1765 (35.31)
Victim characteristics		
Female Sex ^b		3648 (72.97)
Victim mean age (SD)		33.51 (15.45)

^a2 cases reported as being *Unspecified* gender of young FV user; ^b3 cases reported as being *Unspecified* victim gender.

Table 2

Frequency of VP-SAFvR items for 10-24 years and their association with recidivism

Item	VP-SAFvR Items	Present, n	Not Present,	Same Dyac	l Recidivism	Any-Dyad Recidivism	
		(%)	n (%)	$\chi^2(p)$	OR [95% CI]	$\chi^2(p)$	OR [95% CI]
1	Does the FV-user act in ways that are jealous or	1152	3847 (76.96)	24.92	1.45	15.08	1.31
	controlling of the victim?	(23.04)		(<.001)	[1.25-1.68]	(<.001)	[1.14-1.50]
2	Abusive behaviour has been occurring for more than one	2326	2673 (53.47)	53.0	1.62	62.04	1.60
	month	(46.53)		(<.001)	[1.42-1.84]	(<.001)	[1.42-1.79]
3	Were there children (under 18) present during the	1891	3108 (62.17)	1.95 (.162)		5.76 (.016)	1.16
	current incident?	(37.83)					[1.03-1.30]
4	Are the victim or the FV user having financial	931 (18.62)	4068 (81.38)	22.76	1.47	17.67	1.37 [1.18-
5	problems? Have the victim and the FV user recently separated or is separation imminent?	981 (19.62)	4018 (80.38)	(<.001) 3.70 (.054)	[1.25-1.72]	(<.001) 0.16 (.689)	1.58]
6	Is the victim or FV user pregnant or have they given	309 (6.18)	4690 (93.82)	5.48 (.019)	1.35	0.36 (.547)	
	birth in the past six months?				[1.05-1.74]		
7	Possible/definite alcohol or drug use by FV-user around	1543	3456 (69.13)	1.29 (.256)		11.19(<.001)	1.24
	time of index incident?	(30.87)					[1.09-1.40]
8	Possible/definite alcohol or drug use by victim around	578 (11.56)	4421 (88.44)	0.84 (.360)		0.41 (.522)	1.06
	time of index incident?						[.89-1.27]

9	Does the victim have any mental health issues?	1036	3963 (79.28)	7.58 (.006)	1.24	3.66 (.056)	
		(20.72)			[1.06-1.45]		
10	Are there any prior family violence incidents involving	3369	1630 (32.61)	117.84	2.33	276.73	3.20
	the same two parties?	(67.39)		(<.001)	[2.0-2.73]	(<.001)	[2.78-3.69]
11	Does the current FV-user have prior FV incidents as the	2068	2931 (58.63)	216.58	2.66	195.77	2.31
	FV-user or the victim?	(41.37)		(<.001)	[2.33-3.04]	(<.001)	[2.06-2.61]
12	FV-user ever been charged with contravention of a	878 (17.56)	4121 (82.44)	141.46	2.51	269.31	3.38
	restraining order?			(<.001)	[2.15-2.93]	(<.001)	[2.90-3.92]
13	FV-user ever been charged with breaching a court order?	1090	3909 (78.20)	88.54	2.00	161.20	2.39
		(21.80)		(<.001)	[1.73-2.32]	(<.001)	[2.09-2.75]
14	FV-user previously been charged with a violent offence?	1807	3192 (63.85)	68.97	1.74	167.34	2.19
		(36.15)		(<.001)	[1.53-1.99]	(<.001)	[1.95-2.47]

Note. FV refers to family violence. Items 2, 7 and 8 have been dichotomised for ease of tabulation. df = 1. OR = Odds ratio.

Table 3

Score Category		n (%)	Family violence	Cumulative family
		recidivism, $N(\%)$	violence recidivism (%)	
0	0	284 (5.68)	19 (1.57)	1.57
1	1	535 (10.70)	71 (5.86)	7.43
2	2	586 (11.72)	88 (7.26)	14.69
3	3	613 (12.26)	125 (10.31)	25.00
4	4	647 (12.94)	160 (13.20)	38.20
5	5	598 (11.96)	147 (12.13)	50.33
6	6	544 (10.88)	152 (12.54)	62.87
7	7	417 (8.34)	141 (11.63)	74.50
8	8	294 (5.88)	105 (8.66)	83.17
9	9	240 (4.80)	98 (8.09)	91.25
10-16 ^a	10	241 (4.82)	106 (8.75)	100.0

VP-SAFvR Part A score and same-dyad family violence recidivism in total sample aged 10-24 years

^aScores of 10 and above were grouped due to low prevalence and comprised 8.7% of the total

sample

Table 4

Threshold Score	Sensitivity [95% CI]	Specificity [95% CI]	PPV [95% CI]	NPV [95% CI]	Relative Risk ^a
1+	.98 [.9899]	.07 [.0608]	.25 [.2427]	.93 [.9096]	3.78 [2.44-5.85]
2+	.93 [.9194]	.19 [.1821]	.27 [.2628]	.89 [.8791]	2.43 [1.99-2.98]
3+	.85 [.8387]	.32 [.3134]	.29 [.2730]	.87 [.8589]	2.27 [1.96-2.63]
4+	.75 [.7277]	.45 [.4447]	.30 [.2932]	.85 [.8387]	2.03 [1.81-2.28]
5+	.62 [.5965]	.58 [.5760]	.32 [.3034]	.83 [.8184]	1.85 [1.67-2.04]
6+	.50 [.4753]	.70 [.6972]	.35 [.3237]	.81 [.8083]	1.86 [1.68-2.04]
7+	.37 [.3440]	.80 [.7982]	.38 [.3541]	.80 [.7981]	1.89 [1.71-2.08]
8+	.25 [.2328]	.88 [.8789]	.40 [.3643]	.79 [.7780]	1.87 [1.68-2.07]
9+	.17 [.1519]	.93 [.9293]	.42 [.3847]	.78 [.7679]	1.90 [1.69-2.14]
10+	.09 [.0711]	.96 [.9697]	.44 [.3851]	.77 [.7678]	1.89 [1.63-2.20]

Classification accuracy of the VP-SAFvR for 10-24-year-olds for same-dyad recidivism

^aRelative risk refers to the risk of same-dyad recidivism if an individual scores at or above the given threshold relative to those who score

below the threshold

Table 5

Classification accuracy of the VP-SAFvR at a threshold score of 3 and 4 for same-dyad recidivism overall and by age

	Recidivism, N (%)	AUC [95% CI]	Score	Sensitivity	Specificity	PPV	NPV	Relative Risk
10-24 years	1212 (24.24)	.65 [.6366]	3	.85 [.8387]	.32 [.3134]	.29 [.2830]	.87 [.8589]	2.27 [1.96-2.62]
			4	.75 [.7277]	.45 [.4447]	.30 [.2932]	.85 [.8387]	2.03 [1.80-2.28]
Under 18 years	407 (25.50)	.65 [.6268]	3	.79 [.7583]	.42 [.3945]	.32 [.2935]	.85 [.8288]	2.16 [1.74-2.69]
(10-17yrs)			4	.66 [.6171]	.56 [.5359]	.34 [.3137]	.83 [.8085]	1.98 [1.65-2.37]
10-14 years	159 (26.81)	.67 [.6272]	3	.74 [.6680]	.50 [.4655]	.35 [.3041]	.84 [.7988]	2.18 [1.60-2.99]
			4	.59 [.5167]	.68 [.6372]	.40 [.3447]	.82 [.7786]	2.19 [1.67-2.87]
15-19 years	463 (24.69)	.67 [.6470]	3	.86 [.8389]	.35 [.3338]	.30 [.2833]	.89 [.8691]	2.66 [2.09-3.40]
			4	.75 [.7179]	.49 [.4651]	.32 [.3035]	.86 [.8388]	2.24 [1.86-2.71]
20-24 years	590 (23.31)	.64 [.6267]	3	.88 [.8590]	.26 [.2428]	.27 [.2529]	.88 [.8590]	2.14 [1.71-2.69]
			4	.79 [.7682]	.38 [.3640]	.28 [.2630]	.86 [.8388]	1.95 [1.63-2.34]

 $\overline{Note. All AUC}$ values are significant at the *p*<.001 level

Table 6

		1. 1. 1	$1 1 \cdots 1 \cdots C$	1 1 • 1• •
Classification accuracy	οττρέν Ρ-ΝΑΗνκ	αςςονάτησ το σρηάργ (ind relationship for sav	$n\rho$ -dvad $r\rho cidivism$
Classification accuracy				

	Recidivism	AUC	Score	Sensitivity	Specificity	PPV	NPV	Relative Risk
	N (%)	[95% CI]						
Male	875	.65	3	.86 [.8388]	.33 [.3135]	.30 [.2832]	.88 [.8590]	2.42 [2.03-2.89
	(24.87)	[.6367]	4	.76 [.7379]	.45 [.4447]	.31 [.3034]	.85 [.8387]	2.10 [1.83-2.4]
Female	337	.63	3	.84 [.7987]	.31 [.2833]	.26 [.2429]	.86 [.8390]	1.92 [1.48-2.5]
	(22.80)	[.6066]	4	.73 [.6878]	.45 [.4248]	.28 [.2531]	.85 [.8288]	1.85 [1.49-2.30
Child-to-parent abuse	550	.62	3	.83 [.8086]	.32 [.3035]	.31 [.2934]	.84 [.8087]	1.94 [1.59-2.3]
	(27.15)	[.6065]	4	.73 [.6976]	.45 [.4247]	.33 [.3036]	.81 [.7984]	1.77 [1.50-2.0
Intimate partner abuse	532	.64	3	.88 [.8591]	.27 [.2429]	.32 [.2934]	.86 [.8289]	2.19 [1.72-2.79
	(27.90)	[.6166]	4	.79 [.7582]	.39 [.3641]	.33 [.3136]	.83 [.7985]	1.91 [1.59-2.3
Sibling abuse	69 (11.90)	.65	3	.77 [.6586]	.39 [.3544]	.15 [.1119]	.93 [.8896]	1.97 [1.16-3.3
		[.5871]	4	.68 [.5678]	.55 [.5059]	.17 [.1322]	.93 [.8995]	2.30 [1.43-3.7]

Note. All AUC values are significant at the p<.001 level

Chapter Seven: Study Three

7.1. Rationale for Study Three

Chapter Seven presents the third paper of this thesis. Young people who engage in family violence often do so as part of a broader pattern of antisocial behaviour (Moulds et al., 2019). However there is a lack of research comparing youth who come to police attention for engaging in family violence as part of a broader pattern of offending behaviour (generalists) from those who only come to police attention for using family violence (family-only). The second paper sought to investigate differences in the characteristics and recidivism risk of generalist and family-only youth reported to police for using family violence. The findings of this paper contribute to the youth family violence field by acknowledging the interconnectedness of different forms of antisocial and violent behaviour and how this may inform assessment and intervention. The third study addresses both the first and second research aims, by advancing understanding of the characteristics of youth family violence and knowledge regarding family violence recidivism risk.

The third study, titled '*The relevance of prior offending to risk and need in youth family violence: a population cohort study*' was accepted for publication by the *Journal of Family Violence* on 12th August 2022. This article is available at <u>https://doi.org/10.1007/s10896-022-00432-3</u>. The *Journal of Family Violence* is an interdisciplinary peer-reviewed journal that disseminates research focused on addressing all forms of family violence. The current impact factor of *Journal of Family Violence* is 2.18 (Clarivate Analytics, 2020). The 'Author Indication Form' detailing the nature and extent of the candidate and co-authors' contributions to this published study is included in Appendix I.

The Relevance of Prior Offending to Risk and Need in Youth Family Violence: A

Population Cohort Study

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The authors have no conflicts of interest to disclose. This study involves secondary analysis of data from a larger project, as described in the method section. The specific ideas and data analyses presented in this work have not previously been published or presented.

Abstract

Purpose: The present study examines differences in the characteristics and recidivism risk of young people reported to police for family violence (FV) with a history of prior offending (generalists) and those only known to police for using FV (family-only). **Method:** A population-based cohort of youth aged 10-24 years (*N* = 5014) who were reported to police for using FV over a four-month period in 2019 was examined and FV-related risk and need data extracted, with a six-month follow-up period for further police-reported FV. All data was extracted from police databases. Logistic regression with odds ratios as a measure of effect size were used to compare generalist and family-only cohorts. Cox proportional hazards were used to assess time to FV recidivism among the two cohorts, and to assess whether diversity of prior offending was associated with risk of FV recidivism among generalist youth. **Results**: Generalists were more likely than family-only youth to be recorded as using FV in a high severity FV incident, be abusive across multiple relationships, and breach court orders. Generalists experienced a greater level of need and were more likely to engage in FV recidivism, and do so more quickly, than family-only youth. Diversity of prior offending among generalists was positively associated with risk of FV recidivism.

Conclusion: Compared to family-only youth, generalists represent a higher risk cohort with a greater level of need. History of prior offending among young people may be a simple and efficacious means of prioritising higher risk youth who use FV.

Keywords: Family violence, youth, child-to-parent abuse, intimate partner abuse, sibling abuse, offending

The Relevance of Prior Offending to Risk and Need in Youth Family Violence: A Population Cohort Study

Youth family violence (FV) constitutes approximately 8-10% of police-reported FV incidents involving adolescents (aged 10-17 years; Phillips, & McGuinness, 2020; Snyder & McCurley, 2008), while 26% of all police-reported FV incidents involve those aged 20-29 years (Coghlan & Millsteed, 2017). Young people who engage in FV often do so as part of a broader pattern of antisocial behaviour (Moulds et al., 2019), yet limited research directly compares youth who engage in both FV and other offending (generalists) with young people who only engage in FV (family-only; see Ibabe & Jauraguizer, 2010; Moulds et al., 2019).

Broad definitions of FV are increasingly being adopted in recognition of its complex and multifaceted nature (Farrington et al., 2021; Jolliffe Simpson et al., 2021). These definitions conceptualise FV as involving abuse toward relatives (e.g. parents, siblings, other relatives) and abusive behaviour towards dating or intimate partners, with both physical (e.g. physical assault, sexual assault, etc.) and non-physical (e.g. psychological abuse) behaviour recognised under the umbrella of FV. Additionally, in many jurisdictions (Jolliffe Simpson et al., 2021; Miles & Condry, 2016; Spivak et al., 2021), legislative definitions of FV include behaviours that are not otherwise criminal (e.g. verbal abuse such as swearing and screaming at the victim). For example, in the Australian state of Victoria, only half (50.8%) of all police-recorded FV incidents in Victoria between 2020-21 involved a criminal offence for which charges were laid (Crime Statistics Agency, 2021a).

The Interconnectedness of Family Violence and Antisocial Behaviour

Family violence and general antisocial behaviour are often examined separately, yet are interconnected (Farrington & Tofti, 2021; Gottfredson & Hirschi, 1990). General theories of crime suggest that the many forms of offending and violence stem from similar underlying risk factors, traits, interactions within one's environment (Gottfredson & Hirschi, 1990;

McCloud, 2021). Both the general and FV offending literatures highlight factors such as low levels of self-control (Gottfredson & Hirschi, 1990; McCloud, 2021), issues with social bonding (Hirschi, 1969; Foshee et al., 1999), social learning (Foshee et al., 1999; McCloud, 2021), and high levels of environmental strain (Agnew, 2006; McCloud, 2021) as relevant to engagement in offending and youth FV.

Additional risk factors common to both general offending and FV among young people and adults have been identified in the literature. These include an early-onset and diverse pattern of antisocial behaviour (Farrington & Tofti, 2021; Piquero et al., 2014; Verbruggen et al., 2021), mental health issues (Kennedy et al., 2010; Simmons et al., 2018), substance use issues (Simmons et al., 2018; Sjodin et al., 2017), a history of victimisation (Kennedy et al., 2010; Verbruggen et al., 2021), school problems (Simmons et al., 2018), and unemployment (Sjodin et al., 2017). These risk factors are more common among young people who engage in FV and other offending behaviour, compared to those who only offend outside the family context (Ibabe & Jauraguizar, 2010; Kennedy et al., 2010).

Family-only and generalist family violence types in adult samples

There is a high co-occurrence of FV and general offending behaviour among both adult (Hilton & Eke, 2016; Dowling et al., 2021) and youth samples (Moulds et al., 2019; Verbruggen et al., 2021). Adults who engage in both FV and other offending (i.e. generalists) comprise between 42 – 96% of all FV users (Dowling et al., 2021; Goldstein et al. 2016; Hilton & Eke, 2016; Petersson et al., 2019), while family-only adults comprise approximately 47.5% of all adult FV users (Petersson & Strand, 2020). These results indicate two groups of FV-users, with prior research suggesting that the identification of individuals using the generalist/family-only typology is essential for assessment and intervention (Petersson & Strand, 2020).

Generalists display a greater level of violence-associated risk factors than family-only individuals, indicating an elevated level of risk and need (Goldstein et al., 2016; Petersson & Strand, 2020). The concepts of risk and need are drawn from the Risk-Need-Responsivity (RNR; Bonta & Andrews, 2016) framework. This framework highlights the importance of matching interventions to the individual's risk of recidivism (i.e. high risk offenders receive more intensive support; *risk principle*), and that criminogenic needs (e.g. substance abuse, history of antisocial behaviour, education/employment) should be targeted as part of any intervention (*need principle*; Bonta & Andrews, 2016).

The higher level of risk and need among generalists is demonstrated by their frequent and chronic offending (Boxall et al., 2020; Verbruggen et al., 2021), breach offences (Coghlan & Millsteed et al., 2017), and higher levels of FV and non-FV recidivism (Petersson & Strand, 2020). The elevated level of criminogenic need among generalists is demonstrated through their more extensive history of antisocial behaviour (Petersson & Strand, 2020), elevated level of substance abuse problems (Coghlan & Millsteed, 2017), higher levels of unemployment (Coghlan & Millsteed, 2017; Petersson & Strand, 2020), and greater association with antisocial peers (Petersson & Strand, 2020). Similarly, generalists display a higher level of non-criminogenic need – which is important for the purposes of risk management and intervention – compared to family-only individuals, including elevated levels of mental health and substance abuse problems (Coghlan & Millsteed, 2017) and more significant victimisation histories (Petersson & Strand, 2020; Verbruggen et al., 2021).

Youth-specific research examining the presence of generalist and family-only subtypes is needed as much of the adult literature is only applicable in a limited capacity. Much of the research pertains to physical intimate partner abuse by males, whereas most youth FV involves child-to-parent abuse and is less gendered than adult FV (Phillips & McGuinness,

2020). Second, young people are undergoing significant developmental changes which can impact applicability of adult research to youth samples (Borum, 2000).

Family-only and generalist subtypes in youth samples

The examination of family-only and generalist subtypes among youth is limited, despite being recognised as important for risk assessment and treatment (Boxall & Sabol, 2021; Petersson & Strand, 2020). There is emerging literature comparing generalists to non-FV offenders (Kennedy et al., 2010; Kuay et al., 2016; Sjodin et al., 2017), however direct comparisons of generalist and family-only youth are limited.

Ibabe and Jaureguizer (2010) examined the files of Spanish youth aged 14-18 years charged with parent abuse. the authors found that family-only youth (i.e. those only charged with parent abuse) were more likely to be female, experienced better family economic status, displayed fewer disruptive behaviours in the school, and had a less extensive history of parent abuse than their generalist counterparts (i.e. those charged with both parent abuse and other non-FV offending; Ibabe & Jaureguizer, 2010).

Moulds and colleagues (2019) analysed the data of Australian young people aged 10-17 years (n = 305) who had been apprehended by police for violence against a parent or stepparent. The sample was organised according to whether they had only ever been arrested for a single incident of parent abuse, both parent abuse and non-violent offences, or parent abuse and other violent offences. The authors found that parent abuse in isolation was rare, most youth who were arrested for abusing their parents went on to offend violently, and prior offending was a strong indicator of future offending (Moulds et al., 2019).

The results of these two studies (Ibabe & Jaureguizer, 2010; Moulds et al., 2019) suggest generalist and family-only youth may represent two distinct cohorts. However, the generalisability of these findings is limited due to their specific focus on child-to-parent abuse among young people under the age of 18 years and their use of data drawn from

official charges. Young people who use FV may engage in abusive behaviour toward multiple victims (Boxall & Sabol, 2021; Kuay et al., 2016) and research indicates less than half (48.8%) of police reports for FV in some jurisdictions result in criminal charges (Crime Statistics Agency, 2021a). As a result, these methodologies are significantly less likely to capture the broad range of behaviours which constitute FV. Similarly, police, youth service providers and justice agencies in Australia are often required to engage young people up to 25 years old (McGorry et al., 2022) who participate in a range of abusive and antisocial behaviour. As a result, additional research is needed to broaden both the scope of FV behaviour that is considered, as well as the age of FV users, to ensure a more comprehensive understanding of the generalist/family-only phenomenon.

The Present Study

This study adds to the relatively limited existing literature on general offending by young people who engage in FV. We sought to determine how the characteristics of young people reported to police for FV who have a history of prior non-FV offending (generalists) differed from those who are known to police only for engaging in FV (family-only). We conducted exploratory analyses comparing the individual characteristics and FV incident characteristics of generalist and family-only youth. We also aimed to test the following hypotheses informed by the extant research with adults and adolescents:

Hypothesis 1: Generalist youth will have a more extensive lifetime history of FV perpetration compared to family-only youth, as indicated by a greater likelihood of using FV in a high severity FV incident, increased likelihood of being reported as abusive across more than one relational dyad, and increased likelihood of breaching court orders related to FV. This hypothesis is drawn from literature suggesting both adult (Petersson & Strand, 2020) and youth (Moulds et al., 2019) generalists display a more extensive history of FV behaviour, and adult generalists display a greater number of breaches (Coghlan & Millsteed et al., 2017; Morgan et al., 2018) than family-only individuals.

Hypothesis 2: Generalist youth will display a greater level of need than family-only youth, as indicated by higher levels of police-identified mental health issues, substance abuse, issues with school truancy/unemployment, and victimisation histories. Research shows generalists display more mental health issues (Kennedy et al., 2010) and school/employment issues (Ibabe & Jaureguizar, 2010) than non-FV offenders and family-only youth, while the adult literature shows a higher level of substance abuse and victimisation among generalists than family-only individuals (Petersson & Strand, 2020).

Hypothesis 3: Generalist youth will display more FV recidivism compared to familyonly youth, as indicated by being more likely to be identified as using abusive behaviour in a subsequent FV incident and in a high severity FV incident during the follow-up period. Generalist youth will also engage in FV recidivism more quickly than family-only youth. Adult generalists are significantly more likely to reoffend than family-only individuals, and to display more severe FV behaviour (Goldstein et al., 2016; Petersson & Strand, 2020).

Hypothesis 4: A greater diversity of prior offending behaviour among generalist youth will be associated with shorter time to FV recidivism. Family violence research suggests greater diversity of offending is associated with higher frequency of FV (Boxall et al., 2015) which, in turn, is associated with shorter time to FV recidivism (Boxall & Morgan, 2020)

Method

Sample

This study involved analysis of all police-reported FV incidents in the Australian state of Victoria between 1 September and 31 December 2019 (index period) in which a young person aged 10 to 24 (inclusive) was listed as the person responsible for aggression (the respondent, in police parlance) (N = 5014). Apart from young people being 10-24 years of age at the time of the index incident, no other inclusion or exclusion criteria were used. The age range was chosen because the minimum age of criminal responsibility in the jurisdiction

from which these results were drawn is 10 years (Children, Youth, and Families Act, 2005, s.344) whilst the inclusion of young people up to, and including, 24 years old is in recognition that youth services are increasingly being required to engage with young adults (up to age 25 years; McGorry et al., 2022). The World Health Organisation (WHO) has formally recognized the parallels between those in adolescence and young adulthood, defining 'young people' as those aged 10-24 years (WHO, 2021).

The sample was drawn from all 24,419 FV incidents recorded by police during the same period, with the exception of 358 (1.50%) that were missing respondent age and so were excluded. Victoria Police are the sole policing agency for the Australian state of Victoria (a jurisdiction approximately the same geographic size as the United Kingdom with a population of 6.63 million at the time of the study; 66.99% of whom live in the capital city of Melbourne; Australian Bureau of Statistics (ABS), 2021). Victoria Police record all incidents of family violence as a matter of policy, regardless of whether charges were laid.

Young people who used FV were identified at the time of their index FV incidents and their data were linked to lifetime historical data and outcome data in the six-months following the index FV incidents. Over two thirds of FV users were male (n = 3528, 70.40%) with the remaining being female (n = 1484, 29.61%). There were two cases (0.04%) in which the sex of the FV user was not specified. The mean age of FV users was 19.19 years (SD = 3.51) at the time of the index incident. Victims were primarily female (n = 3660, 73.00%), with three cases (0.06%) not specifying victim sex. The mean age of victims was 33.49 years (SD = 15.45).

Definition of Family Violence

Victoria Police use a definition of FV from the *Family Violence Protection Act 2008* to identify when to record an incident of FV. The Act defines FV as: "behaviour by a person towards a family member of that person if that behaviour is physically or sexually abusive; or is emotionally or psychologically abusive; or is economically abusive; or is threatening; or

coercive; or in any other way controls or dominates the family member and causes that family member to fear for the safety and wellbeing of that family member or another person" (Family Violence Protection Act, 2008, s.5). Under the Act, the term *family member* refers to relatives, intimate partners, children who normally reside with the victim and/or FV user as well as "any other person whom the relevant person regards or regarded as being like a family member" (Family Violence Protection Act, 2008, s.8), such as foster carers. Importantly, not all forms of FV recorded under the Act involve a criminal offence (e.g., there is no specific offense relating to psychological abuse or coercion in Victoria). In Victoria, only half (n = 47468, 50.8%) of all FV incidents between July 2020 and June 2021 involved a criminal offence for which charges were laid (Crime Statistics Agency, 2021a).

Data Source

All data were extracted by Victoria Police staff from the Law Enforcement Assistance Program (LEAP), an electronic database used by Victoria Police to record all known offences and police involvements, regardless of outcome (e.g. arrested, charged, convicted). All data from the first FV incident involving a unique dyad during the index period was collected. Whenever Victoria Police members respond to an incident of FV, they record characteristics of the incident, the victim, the person using FV, and their relationship as part of a FV report (see the Victoria Police Code of Practice for the Investigation of Family Violence, s.3, for a description of the FV recording procedure employed at the time of this study). In addition to the demographic information of the young person who used FV and victim, the FV report contains 39 separate risk factors associated with future FV behaviour or lethal FV incidents which police score at the time of the index incident. This allows Victoria Police to collect information on a range of evidence-based factors related to future FV events (Spivak et al., 2021). All available data from the FV reports involving a unique relationship dyad during the index period was linked to historical and outcome data for each young person and victim.

Demographic Variables

The sex and age of the victim and young person who used FV were recorded on the FV report at the time of the index incident, as well as accessibility needs and relationship type. Sex was coded in as either male or female whilst age was analysed as both a continuous variable and as a categorical variable with three levels: 10-14 years, 15-19 years, and 20-24 years. Accessibility needs are also recorded by police to identify whether the young person has issues relating to vision, hearing, mobility, understanding, communication, or memory. The relationship of abuse was recorded by the responding police officer according to the type of relationship between the victim and FV-user (i.e. child-to-parent abuse, intimate partner abuse, sibling abuse, other family abuse) at the time of the index incident. The category relating to abuse of other family members may include grandparents, uncles, aunts, cousins, carers, or the child of the young FV-user. Only a single relationship of abuse can be recorded on a FV report. In cases where a young person was abusive toward more than one family member (e.g. both a parent and a sibling), an additional FV report is created.

Socioeconomic status (SES) was approximated using the postcode recorded on the FV report and comparing it with the ABS (2018a) Index of Relative Socio-Economic Advantage and Disadvantage (IRSAD; using Victoria-specific rankings). This resulted in the identification of the postcode's IRSAD decile, allowing researchers to code whether an incident occurred in an SES area identified as being in the lowest 20% (deciles 1 and 2), middle 60% (deciles 3-8), or highest 20% (deciles 9-10) of the state.

Diversity of Prior Non-Family Violence Offending

Comparison of the generalist and family-only youth is done using a dichotomous variable, in which a young person is classified as either a 'generalist' or a 'family-only' youth. The diversity of prior non-FV offending refers to the number of different offence classification types (excluding FV-related offences) that the young person engaged in prior to the index FV

incident. The Victorian Crime Statistics Agency offence classification scheme (Crime Statistics Agency, 2021b) was used, resulting in a score between zero and six. Offences categories included: crimes against the person, property and deception offences, drug offences, public order and security offences, justice procedures offences (e.g. public nuisance, breaches of orders), and other offences (e.g. regulatory driving offences, miscellaneous offences).

Lifetime History of Family Violence Variables

Variables relating to lifetime history of FV represent the combination of all historical FV-reports and index incident information (but not from the six-month follow-up period). These variables are coded dichotomously (i.e. Yes or No).

The variable 'ever abusive across more than one relational dyad' referred to whether a young person has ever (i.e. including both the index incident and any past FV incidents) been reported to police for using FV within two or more of the following relational dyads: child-to-parent abuse, intimate partner abuse, sibling abuse, other family abuse. For example, a young person who has historically been reported to police for being abusive toward their mother, and who then was abusive toward their father at the index incident, would not be identified as having used FV across more than one relational dyad, as both of these are representative of child-to-parent abuse. However, a young person who was previously abusive toward their mother and then used FV toward an intimate partner at the index incident index incident would be identified as abusive across more than one relational dyad.

A high severity FV incident refers to an incident that was associated with a charge (including charges not subsequently authorised for prosecution) in any of the following categories: violent offences (indictable physical assault (excluding unlawful assault); homicide; armed robbery; robbery; aggravated burglary; false imprisonment/kidnap); stalking; threats to harm or kill; sexual offences (including rape and non-rape sexual offences, but excludes charges related to possession or online access, solicitation or distribution of

child abuse material); arson causing death or endangering life; and driving offences causing death or endangering life. The rationale for classifying certain family violence incidents as high severity was to distinguish between incidents that involved physical harm, the threat of physical harm, and/or that had the potential for physical for substantial psychological harm (e.g., stalking, sexual offences) and those that did not. The charges that were included in the definition of a high severity family violence incident were determined by authors TM and BS in consultation with Victoria Police based on the above and the fact that the charges are indictable rather than summary offences

The variables 'ever used physical abuse', 'ever used sexual abuse', and 'ever charged with stalking' refer to whether the young person used these forms of abusive behaviour in past FV incidents, or at the time of the index FV incident. The variables 'ever charged with breaching a court order' or 'ever charged with contravention of a restraining order' are dichotomous (i.e. Yes or No) and were extracted from the 39 questions asked as part of the FV report completed by responding police officers at the time of index incident.

Victimisation, Mental Health, Substance Abuse, and Unemployment/School Truancy

Each of the variables pertaining to the victimisation history of young people who use FV have been dichotomised (i.e. Yes or No) and represent whether a young person has ever been identified as the victim of a police-reported FV event at the time of index FV incident.

Binary dummy variables for each family relationship were created from the variable 'relational dyad in which young person has been victimised' to ascertain history of past FV victimisation. The variable 'victimised across >1 relationship dyad' referred to whether a young person had ever been reported to police as the victim of abuse across at least two of the following: parent-to-child abuse, intimate partner abuse, sibling abuse, other family abuse.

Variables pertaining to the presence of mental health issues, substance abuse, and unemployment/school truancy were recorded in a binary manner (i.e. present or absent). These variables were derived from the 39 questions on the FV report, which police scored based on their questioning and discretion (i.e. asking the young person and the victim about whether the young person uses substances, noticing if the young person appears substance affected at the time of the incident). A formal diagnosis was not required for the presence of a mental health or substance abuse issue to be scored in the affirmative. As a result, prevalence of these issues in the present study are likely to represent relatively gross estimates.

The variables 'experiences substance abuse problems' and 'issues with school truancy/unemployment' were used in the present study as broad indicators of criminogenic need. The variables 'experiences mental health issues and 'historically been the victim of an FVI' are used as broad indicators of non-criminogenic need. Each of these variables were coded dichotomously. The broader offending literature recognises the domains of substance abuse and education/employment are identified as criminogenic needs, while mental health issues and history of victimisation are identified as non-criminogenic needs, or responsivity issues (Bonta & Andrews, 2016).

Family Violence Recidivism Variables

FV recidivism data was obtained from any FV reports uploaded to LEAP in the six months following the index incident in which the young person was reported for using FV again toward any person. All FV recidivism variables were coded dichotomously.

Ethics and Research Approvals

The study was approved by the Swinburne University Human Research Ethics Committee and the Victoria Police Research Coordinating Committee.

Data Analysis

Univariate analyses (i.e. descriptive statistics, chi-square tests, and t-tests) were conducted using IBM SPSS Statistics, version 28 (2020), whilst logistic regressions and cox regression were undertaken using R (R Core Team, 2019). Statistical packages used to analyse data in R include rms (Harrell, 2018), Hmisc (Harrell & Dunpont, 2018), and dyplr (Wickham et al., 2018). Binary logistic regression with odds ratios as a measure of effect size were used to compare generalist and family-only cohorts in terms of lifetime history of FV behaviour (hypothesis one), level of need (hypothesis two), and recidivism characteristics (hypothesis three). Lifetime history variables combined data from both historical incidents and the index incident. Logistic regressions were initially run with a single predictor variable (i.e. generalist vs family-only). However, adjusted odds ratios controlling for age and sex of the young person who used FV were also produced for each model given generalist youth (N= 2609, M = 20.05, SD = 2.97) were significantly older than family-only youth (N = 2405, M= 18.27, SD = 3.81, indicating a statistically significant difference M = 1.78, 95% CI [1.59-1.97], t(5012) = 18.51, p <.001. Generalists were also significantly more likely to be male (χ^2 (1, N = 5012) = 70.42, p < .001, OR = 1.69, 95% CI [1.49-1.91]).

Logistic regression assumes a linear relationship between continuous independent variables (e.g. age of young person who used FV) and the log odds of the dependent variable. A Box-Tidwell test indicated a significant result for both the main term (p < .001) and the interaction term (p < .001) when age of the young person was examined, suggesting a non-linear relationship. Restricted cubic splines were fitted to the age variable to address non-linearity. A cubic spline is a piecewise cubic function used to estimate nonlinear associations in regression analyses, with piecewise functions referring to statistical techniques in which separate slopes are fitted to model various areas of the outcome. This allows a flexible means of modelling relationships that are not adequately accounted for by polynomial transformations

(e.g. squaring the predictor values). The separation points for each slope in the piecewise function are referred to as knots, with three knots applied in the present paper.

Post-hoc analyses examined differences between generalist and family-only youth for individual and index incident variables, with Bonferroni corrections applied and provided at the bottom of the relevant results tables. Analyses related to age of the young person (10-14 years, 15-19 years, and 20-24 years) and the relational dyads in which abuse occurred (child-to-parent abuse, intimate partner abuse, sibling abuse, child maltreatment, and other family abuse) used binary dummy variables. For example, when attempting to determine whether child-to-parent abuse was more common among generalist or family-only youth, child-to-parent abuse was coded as one and all other relational dyads were coded as zero.

Two cox proportional hazards models were constructed with significance tests conducted on the log hazard ratios. The first model examined the relationship between being a generalist or family-only youth and time to FV recidivism (in days), whilst controlling for the age and sex of the young person who used FV (hypothesis three). The second model examined the relationship between diversity of prior offending among generalists and time to FV recidivism (in days), whilst controlling for the age and sex of the generalist youth (hypothesis four). Proportional hazards assumptions were examined by plotting Schoenfeld residuals and conducting significance tests examining the independence between residuals and time. Visual inspection of the residuals plot did not indicate any obvious relationship between residuals and time and tests were not significant at an alpha level of .05.

Results

Demographic Characteristics of Sample the Index Incident

Table 1 provides the descriptive statistics of generalist and family-only youth based on characteristics of the index FV incident. Generalist youth were more likely than family-only youth to be male (χ^2 (1, N = 1972) = 70.42, p < .001, OR = 1.69, 95% CI [1.49-1.91]), aged

20-24 years (χ^2 (2, N = 1544) = 155.82, p < .001, OR = 2.04, 95% CI [1.82-2.28]), and to come from a regional/remote area (χ^2 (1, N = 960) = 28.77, p < .001, OR = 1.38, 95% CI [1.23-1.56]) compared to family-only youth. Generalist youth were significantly more likely to be identified as being in the lowest socioeconomic quintile compared to family-only youth (χ^2 (1, N = 960) = 28.77, p < .001, OR = 1.51, 95% CI [1.34-1.70]).

Most generalist youth had engaged in both violent and non-violent offences (n = 1486, 56.96%), while over one third had engaged exclusively in non-violent offences (n = 1008, 38.64%), and a small proportion had exclusively engaged in violent offences (n = 115, 4.41%). Of those who had been charged with a violent offence, nearly two-thirds (n = 1596, 61.17%,) had been charged with more than one. Sexual offences were examined separately, with 8.59% (n = 224) of generalist youth ever having been charged with a non-FV sexual offence.

Lifetime prevalence of family violence by family-only and generalist youth

The lifetime history of FV behaviour among family-only and generalist youth are provided in Table 2. The adjusted odds of a generalist youth being abusive across more than one relational dyad were 6.04 times greater than for family-only youth. The adjusted odds of generalist youth using FV in a high severity FV incident or engaging in physical abuse during a FV incident were between two to three times greater than for family-only youth, representing small to medium effect sizes (Chen et al., 2010). Large effect sizes were observed regarding the likelihood of breaching a court order and contravening a restraining order, however results should be interpreted with the understanding that only a small proportion of family-only youth ever breached a court order (n = 30, 1.25%) or a restraining order (n = 99, 4.13%). The adjusted odds of breaching a court order were 47.68 times higher for generalist youth than family-only youth, whilst their odds of contravening a restraining order were 8.15 times greater. As an example, the model estimated a 91.60% probability of a 20-year-old male who contravened a

restraining order being a generalist, compared to only a 57.22% probability of being a generalist if they had not contravened a restraining order.

Criminogenic and Non-Criminogenic Needs

The victimisation, mental health, substance abuse, and unemployment/truancy characteristics of the family-only and generalist groups are provided in Table 3. The adjusted odds of a generalist youth having historically been a victim of any FV incident was 3.55 times greater than for family-only youth, whilst the adjusted odds of them being a victim of a high severity FV incident were 3.70 times greater. Their odds of being physically and sexually victimised were between two to three times greater than for family-only youth, whilst their odds of experiencing abuse across more than one relational dyad was 4.39 times greater. Generalists were significantly less likely than family-only youth to be aged 0-11 years when first reported to police as the victim of FV.

While generalist youth showed significantly more mental health issues, substance abuse issues and school truancy/unemployment, the magnitude of the effect sizes differed. The odds of generalists experiencing mental health issues were only 1.40 times greater than for family-only youth, whereas the odds of generalists experiencing substance abuse issues and unemployment issues were 3.68 and 2.53 times greater, respectively.

Family violence recidivism

Over one third (n = 1767, 35.24%) of all young people who used FV at the index incident engaged in FV recidivism during the 6-month follow-up period. As displayed in Table 4, 43.27% (n = 1129) of generalists engaged in FV recidivism, compared to 26.53% (n = 638) of family-only youth. The adjusted odds of generalists engaging in FV recidivism were 2.25 times greater than for family-only youth. As an example, the model estimated a 76.16% probability of a 20-year-old male who engaged in FV recidivism being a generalist, compared to a 58.65% probability of being a generalist if they had not engaged in FV recidivism. The adjusted odds of a generalist youth engaging in a high severity FV recidivism were 2.11 times greater than for family-only youth, and their odds of engaging in FV-based stalking during the follow-up period were 3.06 times greater. There were no significant differences in the likelihood of family-only and generalist youth engaging in sexual abuse as part of a FV incident during the follow-up period, however the adjusted odds of a generalist youth using physical abuse during a subsequent FV incident were 2.19 times greater.

Figure 1 depicts Cox regressions examining: 1) the time to FV recidivism for generalist and family-only youth, controlling for age and sex; and 2) time to FV recidivism according to diversity of prior offending among generalist youth, whilst controlling for the age (using a cubic spline) and sex of the young person. The model examining time to FV recidivism for generalist and family-only youth was significant (Likelihood ratio test = 168.41, df = 4, p <.001), indicating generalists engaged in a subsequent FV incident more quickly than familyonly youth. The hazard ratio for generalist/family-only status (HR = 1.91, 95% CI = 1.72-2.11, p < .001) suggested the risk of FV recidivism was 91% greater for generalist youth.

The model examining time to FV recidivism according to diversity of prior offending among generalist youth was significant (Likelihood ratio test = 218.40, df = 5, p < .001), indicating that a higher diversity of offending is associated with shorter time to FV recidivism. Similarly, the hazard ratio for offending diversity (HR = 1.48, 95% CI [1.32-1.57], p < .001) suggests that the risk of FV recidivism was 1.48 times greater for those who had previously engaged in just one type of (non-FV) offence compared to those who had not ever engaged in prior offending (i.e. family-only youth). Similarly, the difference in recidivism risk between having one type of (non-FV) offence and having engaged in three different offence types gives a hazard ratio of 2.11 [95% CI = 1.88-2.38], suggesting that the risk for FV recidivism more than doubles. However, it appears that there is no substantial increase in risk with each new offence type after engaging in three or more non-FV offence types. The difference in recidivism risk between having two types of offences to three types of offences indicates a 15% increase (HR = 1.15, 95% CI [1.11-1.19]), whilst the increase from three to four offences showed a 9% increased risk (HR = 1.09, 95% CI [1.04-1.15]), and the rise from four to five offences showed an 8% increased risk of recidivism (HR = 1.08, 95% CI [1.02-1.15]).

Discussion

The present study sought to characterise young FV users with a history of prior offending (generalists) and those who were known to police only for engaging in FV (family-only) to determine whether these groups were unique. As anticipated, generalist youth had a more significant history of FV incidents and were a higher-risk group in terms of the likelihood and severity of FV, as well as exhibiting a shorter time-to-recidivism. Generalist youth displayed a diversity of violent and non-violent offending external to the family context, which has previously been observed in both the adult (Coghlan & Millsteed, 2017) and youth (Moulds et al., 2019; Verbruggen et al., 2021) FV literatures. They were also significantly more likely to be in the lowest 20% of socioeconomic status, come from a regional/remote area, and display a greater level of need, as assessed by higher levels of mental health issues, substance abuse problems, victimisation histories, and unemployment/truancy from school.

The first hypothesis was supported, as generalists were significantly more likely than family-only youth to have engaged in a high severity FV incident, to display abusive behaviour across more than one relational dyad, and were more likely to breach court orders than family-only youth. These results are broadly consistent with the adult FV literature, which suggests that generalists display a greater severity of FV (Goldstein et al., 2016) and are more likely to breach court orders than family-only youth (Coghlan & Millsteed, 2017; Morgan et al., 2018). The adjusted odds of a generalist youth breaching a court order were found to be 47.68 times those of family-only youth, whilst their adjusted odds of contravening a restraining order were nearly ten times greater than that of family-only youth. The substantial difference observed

between the groups for breaching court orders and restraining orders may be due to more generalists ever having been placed on these orders, thus resulting in more opportunity for breaches to occur. However, generalists also displayed a greater severity and diversity of behaviour which, coupled with their propensity for breaching legal orders, supports the adult literature indicating generalists are a higher risk cohort (Cantos et al., 2015; Petersson & Strand, 2020; Verbruggen et al., 2021) with elevated levels of antisociality (Petersson & Strand, 2020).

Consistent with the second hypothesis, generalist youth displayed a higher level of police-recorded criminogenic and non-criminogenic need than family-only youth, including more issues with mental health, substance abuse, unemployment and school truancy, and more significant police-reported victimisation histories. The adjusted odds of generalist youth experiencing substance abuse problems were nearly four times that of family-only youth, whilst their adjusted odds of experiencing issues with unemployment or school truancy were 2.53 times that of family-only youth. High rates of substance abuse (Phillips & McGuinness, 2020), and academic issues (Ibabe & Jaureguizer, 2010) have previously been reported for young people who use FV, as have elevated rates of mental health issues (Kennedy et al., 2010; Phillips & McGuinness, 2020), and victimisation (Simmons et al., 2018).

Generalists were more likely to have been the victim of police-reported FV, including high severity FV, were more likely to be abused across more than one dyadic relationship, and were more likely to have experienced physical and sexual abuse than family-only youth. These results suggest a higher level of poly-victimisation and abuse severity among generalists, indicating a greater degree of dysfunction within the family context of generalist youth. These findings are broadly consistent with research suggesting that individuals who experience polyvictimisation are at greater risk of engaging in antisocial behaviour (Papalia et al., 2020) and offending of all types (Papalia et al., 2020) than their non-polyvictimised peers. The findings also support previous research identifying different types of offending and violent behaviour likely stem from similar underlying risk factors (Farrington & Ttofi, 2021). It is therefore possible that factors identified in general theories of crime, such as self-control (Gottfredson & Hirschi, 1990), lack of social bonding (Hirschi, 1969), social learning (Bandura & Walters, 1977), and high levels of environmental strain (Agnew, 2006) may also be more common among generalists and provide some explanation for the higher prevalence of criminogenic and non-criminogenic need within this group.

In contrast, the lower level of risk and need among family-only youth is indicative of "a more socially well-adjusted" (Petersson & Strand, 2020, 378) individual with more prosocial traits. It is possible that the engagement in FV by family-only youth is related to their early FV victimisation. Family-only youth scored significantly higher than generalists in only one domain in the present study, and this was related to whether they had ever been the victim of police-reported FV as a child (aged 0-11). This could indicate the relevance of social learning and/or the presence of dysfunctional family dynamics (Simmons et al., 2018) in the development of FV behaviour among family-only youth (with these factors also likely present among generalist youth), however additional research in this area is needed.

Consistent with the third hypothesis, generalists were more likely to be reported for a subsequent FV incident, and did so more quickly, than family-only youth, similar to research in the adult literature (Petersson & Strand, 2017). The proportion of recidivists in the current sample is higher than that observed in youth FV research with a similar follow-up period (Boxall & Morgan, 2020). This may be the result of the inclusion of youth aged 20-24 years, who are more likely to be generalists, in the present analyses, whereas previous research typically focused on the adolescent period (Boxall & Morgan, 2020; Phillips & McGuinness, 2020). Shorter time to FV recidivism, as displayed by generalist youth, has been associated with more severe offending (Petersson et al., 2019), higher risk of recidivism (Boxall & Morgan, 2020; Petersson & Strand, 2017), and higher frequency of FV incidents (Boxall & Morgan, 2020; Petersson & Strand, 2017), and higher frequency of FV incidents (Boxall & Morgan).

Morgan, 2020) among adult and youth FV users, suggesting generalist youth are likely to come into contact with the justice system more often than their family-only counterparts.

Consistent with the fourth hypothesis, diversity of prior offending was significantly associated with a shorter time to FV recidivism, which is broadly consistent with Gottfredson's and Hirschi's (1990) general theory of crime. It is possible that generalists who engage in more diverse patterns of offending display a higher level of antisociality and use a similar repertoire of skills (i.e. aggression, other antisocial behaviour) both outside and within the family home. This may result in young people accruing a greater range of different offence types whilst also a behavioural repertoire which increases the likelihood that they will respond to familial issues in an aggressive and/or antisocial manner (Boxall et al., 2015).

Yet, the lack of a dose-response relationship once an individual comes to police attention for three or more different offence categories may be indicative of a ceiling effect in level of criminogenic need and/or antisocial tendencies. There may be more variability in the characteristics (e.g. age, SES) and needs (e.g. substance abuse) among those who engage in one or two different offence types, however it is possible that there is a threshold at which level of need and antisociality no longer cumulatively add to an individual's risk of future FV.

Practical Implications

These findings provide a unique contribution to the youth FV field, with this being the first study directly comparing the needs, diversity of offending, and victimisation history among generalist and family-only youth across a broad age range. The findings suggest that generalist youth represent a higher risk cohort with a greater level of need than family-only youth, with implications for risk assessment and intervention.

Classifying young people who use FV as generalist or family-only youth at the assessment stage may assist in the early identification of those most at risk of future FV. The higher prevalence and severity of FV recidivism, coupled with their more rapid rate of recidivism, among generalist youth indicates that the identification of this higher risk cohort at

the time of the index incident may be an efficacious means of identifying those most likely to come to police attention in future. In particular, generalists with a greater diversity of prior offending are at significantly greater risk of using FV in future FV incidents. However, it must be noted that over one quarter (26.53%) of family-only youth engaged in FV recidivism within six months, so generality of violence should be only one of many factors used to inform an assessment of a young person's risk for future FV.

The high level of risk and need exhibited by generalist youth indicates that this cohort should also be prioritised for intervention more readily than family-only youth (Bonta & Andrews, 2016), with extra emphasis placed upon their broader criminogenic and noncriminogenic needs, including mental health, substance abuse, unemployment/school truancy, and victimisation experiences. Results of the present study indicate that adherence to court orders for generalists is less than that of family-only youth, indicating that it may be necessary to engage generalists in pre-treatment interventions addressing their individual needs (e.g. substance abuse, mental health issues, school truancy; Cantos & O'Leary, 2014). Intensive assertive outreach programs may be one way of reducing the high rates of attrition which have been observed among this cohort (Cantos et al., 2015). Specialised case management approaches with assertive outreach addressing individual needs and managing ongoing risk issues have been used internationally with high-risk youth with mental health and substance abuse issues (McGorry et al., 2022) and may be useful for higher risk generalist youth.

Given that greater diversity of offending (i.e. 3+ offence types) among generalists is associated with more rapid FV recidivism, and that shorter time to recidivism is associated with more frequent use of FV (Boxall & Morgan, 2020), there is a need for intervention to be delivered in a timely manner. Similarly, intervention should be prioritised for young people who use FV (Campbell et al., 2020; Purcell et al., 2014), particularly those aged 14 years or younger (regardless of whether they are generalist or family-only), who come to the attention of police or other services, as this early-onset cohort is at an elevated risk of chronic offending (Piquero et al., 2012). This suggests a need to extend evidence-based youth FV treatment programs to include those as young as 10 years old to ensure early intervention occurs.

While generalists appear to represent a group with a higher level of risk and need, it is important to also consider the intervention needs of family-only youth, three of which are discussed here. First, given the diminished criminogenic need displayed by family-only youth (compared to generalists), it may be necessary to consider the role of non-criminogenic needs and family dynamics in their use of their abusive behaviour over time. It is possible that these non-criminogenic factors, including problematic parent-child communication styles and the effects of early family violence victimisation (e.g., development of hostile attributions and reliance on aggressive forms of problem solving), are particularly relevant to likelihood of family violence recidivism among family-only youth. Therefore, while a family-oriented approach to intervention is likely needed for both generalist and family-only youth, it may be particularly relevant for the latter cohort.

Second, in cases where group-based interventions are being utilised, it may be important to treat family-only youth separately from generalists, given their comparatively lower levels of risk and criminogenic need. The RNR model highlights the importance of treating moderate-to-high risk individuals (rather than those at low risk of future problematic behaviour), and to ensure those with reduced levels of risk are not unduly influenced by higher risk members the group (Bonta & Andrews, 2016).

Third, Petersson and Strand (2020) highlight that adult family-only individuals display more prosocial personality traits and less psychopathology than generalists. Although prosocial traits were not examined in the present study, family-only youth were significantly less likely to breach intervention orders, engage in non-family violence offending, and engage in high severity family violence. Therefore, it is possible this group of youth are more

prosocial and would benefit from strengths-based interventions which leverage their various positive attributes.

Limitations and Directions for Future Research

The present study is limited in several respects. First, the use of official police records meant that only FV incidents and prior offending that were reported to police were captured, with the results very likely underestimating the prevalence of FV, general offending and recidivism. Family violence recidivism data was limited to a six-month follow-up period, preventing extrapolation of results beyond six months. However, reduced follow-up time is less of a problem in designs measuring recidivism when using police reports as re-reporting typically happens quickly. For example, Morgan et al. (2018) showed that more than half of all FV recidivists were reported to police within sixty days of their index incident, whilst Boxall and colleagues (2020) showed that the probability of repeat FV by young people declines sharply approximately one month following the index incident.

Given some family-only youth may have engaged in offending behaviour unknown to police, it would be beneficial for future research to examine whether the characteristics of generalist and family-only youth observed here are sustained when using self-reported offending. While these are important limitations, they do not significantly impact upon the import of these results for criminal justice system responses. Police and courts are only able to respond to known incidents and the research presented here is important for informing police responses to FV incidents for which they are called to.

Second, the results are based on police-reported incidents of FV, not necessarily offence or arrest data. While this allows for a broader scope of FV behaviour to be captured, it limits comparison with other studies which do use offence or arrest data and may capture incidents in which FV did not occur. However, the use of incident-based statistics is also a strength as it

allows for consideration of a broader range of FV behaviours, including those not considered criminal offences in the state of Victoria (e.g. psychological abuse, coercive control).

Third, only data pertaining to FV recidivism was available, with information related to general recidivism (i.e. non-FV recidivism) either being unavailable or the variable was found to contain 80% or more missing data and so was excluded from the analysis. This reduces the comprehensiveness of the present study's findings, with future research needed to examine non-FV recidivism (i.e. violent and non-violent offending outside the family context) among generalist and family-only youth. Providing a more complete picture of other offending outcomes would help support resource allocation among police and service providers.

An additional area for future research would be to determine whether young FV-users differ from the average violent young offender (i.e. those who are violent outside the family context). Whilst Sjodin and colleagues (2017) have conducted some comparisons, the study was limited by their focus on male dating violence and sampling from imprisoned young adults aged 18-25 years. Research employing a broader age range, includes both male and female FV-users, and which examines multiple relationships of abuse will assist in identifying the key risks and needs differentiating the groups which can then be used to develop tailored assessment and intervention strategies. Similarly, further research identifying whether generalists and family-only youth reoffended within the same relationship dyad may assist to further understand diversity of behaviour among these cohorts.

Conclusion

Generalist and family-only youth represent distinct subgroups of young FV-users with generalists displaying a significantly higher level of risk and need. Results provide support for generalist youth to be prioritised for assessment and intervention and indicate the need to reconceptualise how youth FV is addressed and managed, however also indicates the presence of a discernibly different group of youth who engage in FV despite a lower level of need. This

research suggests potential avenues for further research such as the self-reported motivations for FV behaviour between the two cohorts and situational and contextual antecedents of abusive incidents associated with the use of violence by generalist versus family-only youth.

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		Generalist, <i>n</i> (%)	Family-only, <i>n</i> (%)
Characteristics of young person who used	FV		
N (%)		2609 (52.0)	2405 (48.0)
Male sex		1972 (75.58)	155.6 (64.75)
Age	10-14 years	102 (3.91)	492 (20.46)
	15-19 years	963 (36.91)	914 (38.00)
	20-24 years	1544 (59.18)	999 (41.54)
	Mean age (M, SD)	20.05 (2.97)	18.27 (3.81)
Accessibility needs		46 (1.83)	33 (1.73)
Lowest Socioeconomic status	Lowest 20%	988 (37.87)	691 (28.73)
Victim Characteristics			
Female sex ^c		1953 (74.86)	1707 (71.07)
Age (M, SD)		33.40 (15.20)	33.59 (15.72)
Incident characteristics			
Location	Metropolitan	1649 (63.20)	1692 (70.35)
	Regional/remote	960 (36.80)	713 (29.65)
Relational dyad of abuse	Child-to-parent abuse	955 (36.60)	1074 (44.66)
	Intimate partner abuse	1098 (42.09)	816 (33.93)
	Sibling abuse	287 (11.00)	295 (12.27)
	Other family abuse ^d	269 (10.31)	220 (9.15)
High severity incident	-	338 (12.96)	258 (10.73)

Table 1Demographic characteristics of sample at the time of the index incident

^a2 cases reported as being *unspecified* sex of young person who used FV; ^bAccessibility needs include issues with vision, hearing, mobility, communication, memory and understanding. ^c3 cases reported as being *Unspecified* victim sex; ^dOther Family includes grandparents, cousins, aunts, uncles, carers.

Table 2

<i>Lifetime history of family</i>	violence behaviour among	generalist and family-only youth

	00				
	Generalist, <i>n</i> (%)	Family-only, <i>n</i> (%)	р	OR [95% CI]	Adjusted OR [95% CI]
Ever abusive across more than one	1170 (44.84)	249 (10.35)	<.001*	7.04 [6.05-8.20]	6.04 [5.17-7.05]
relational dyad					
Ever listed as respondent in a high	813 (31.16)	160 (6.65)	<.001*	6.35 [5.30-7.61]	2.75 [2.39-3.15]
severity FV incident ^a					
Ever used physical abuse	1441 (55.23)	747 (31.06)	<.001*	2.74 [2.44-3.08]	2.27 [2.01-2.56]
Ever used sexual abuse	212 (8.13)	180 (7.48)	.398	1.10 [.89-1.35]	
Ever charged with stalking	73 (2.80)	22 (0.91)	<.001*	3.12 [1.93-5.04]	2.46 [1.51-4.01]
Ever charged with breaching a court order	1060 (40.78)	30 (1.25)	<.001*	54.41 [37.64-78.66]	47.68 [32.91-69.07]
Ever charged with contravention of a	779 (29.97)	99 (4.13)	<.001*	9.95 [8.00-12.37]	8.15 [6.53-10.17]
restraining order					

Note. FVI refers to family violence incident. *Bonferroni-adjusted p-value significant at p = .0036. ORs adjusted for respondent age and sex.

^aRespondent refers to the person identified as responsible for using abusive behaviour at the FV incident

Table 3

Victimisation, mental health, substance abuse and unemployment/truancy characteristics of family-only and generalist cohorts

		Generalist	Family-only	OR [95% CI]	Adjusted OR	
		n (%)	n (%)		[95% CI]	
Victimisation history						
Historically been victim of an FVI		1355 (51.94)	684 (28.44)	2.72 [2.42-3.06]	3.55 [3.10-4.05]	
Historically been victim of a high severity FVI		416 (15.94)	131 (5.45)	3.29 [2.68-4.04]	3.70 [2.98-4.60]	
Aged 0-11 years at first FVI		210 (15.29)	166 (23.51)	.59 [.4774]	.97 [0.74-1.27]	
Relational dyad in which young person has	Parent-to-child abuse	761 (29.17)	389 (16.17)	2.13 [1.86-2.45]	2.84 [2.44-3.30]	
been victimised	Intimate partner abuse	600 (23.00)	231 (9.60)	2.81 [2.39-3.31]	3.18 [2.63-3.83]	
	Sibling abuse Other family abuse	60 (2.30) 577 (22.12)	27 (1.12) 205 (8.52)	2.07 [1.31-3.28] 3.05 [2.57-3.61]	2.27 [1.40-3.67] 3.37 [2.81-4.03]	
Victimised across >1 relationship dyad		507 (19.43)	151 (6.28)	3.60 [2.97-4.36]	4.39 [3.56-5.40]	
Victim of sexual abuse in a historical FVI		118 (4.52)	54 (2.25)	2.06 [1.49-2.86]	3.02 [2.13-4.27]	
Victim of physical abuse in a historical FVI		623 (23.88)	326 (13.56)	2.00 [1.73-2.32]	2.55 [2.17-2.99]	
Mental health, substance abuse and truancy/unem	ployment					
Experiences mental health issues		1175 (45.21)	942 (39.25)	1.28 [1.14-1.43]	1.40 [1.24-1.59]	
Ever threatened or attempted suicide		630 (24.24)	442 (18.42)	1.42 [1.24-1.63]	1.37 [1.21-1.54]	
Subject of historical mental health transfer Experiences substance abuse problems		781 (29.93) 1220 (46.94)	330 (13.72) 407 (16.96)	2.69 [2.33-3.10] 4.33 [3.80-4.94]	2.87 [2.46-3.33] 3.68 [3.21-4.21]	
Issues with school truancy/unemployment		1205 (46.36)	612 (25.50)	2.53 [2.24-2.85]	2.53 [2.23-2.87]	

Note. FVI refers to family violence incident. All p-values significant at (or below) Bonferroni-adjusted p-value of p = .0017. ORs adjusted for age and sex of FV user.

Table 4

	Generalist	Family-only	р	OR [95% CI]	Adjusted OR
	n (%)	n (%)			[95% CI]
Reported as the respondent in any FVI	1129 (43.27)	638 (26.53)	<.001*	2.11 [1.88-2.38]	2.25 [1.99-2.55]
Reported as the respondent in a high severity FVI	186 (7.13)	79 (3.28)	<.001*	2.26 [1.73-2.96]	2.11 [1.60-2.79]
Engaged in physical abuse in FVI	403 (15.45)	190 (7.90)	<.001*	2.13 [1.78-2.56]	2.19 [1.81-2.65]
Used sexual abuse in FVI	17 (0.65)	8 (0.33)	.109	1.97 0[.05-4.56]	
Engaged in family violence-based stalking behaviour	19 (0.73)	4 (0.17)	.003*	4.40 [1.50-12.96]	3.06 [1.03-9.09]

Family violence recidivism by generalist and family-only cohorts during 6-month follow-up period

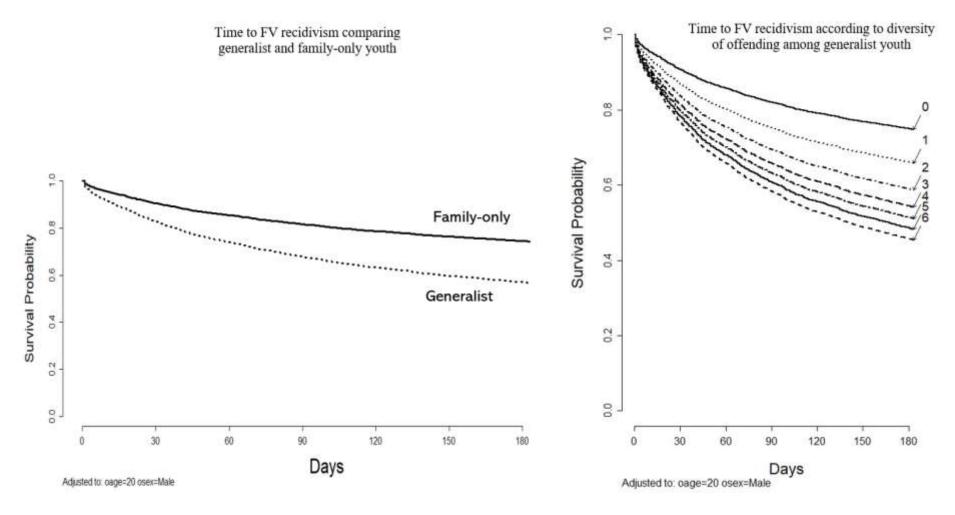
Note. FVI refers to family violence incident. Respondent refers to the person identified as responsible for using abusive behaviour at the FV

incident. *Bonferroni-adjusted p-value significant at p = .005. ORs adjusted for respondent age and sex.

Figure 1

Cox regression survival curves examining time to family violence recidivism for generalist (N = 2609) and family-only (N = 2405) youth, and

according to diversity of offending among generalist youth



Chapter Eight: Study Four

8.1. Rationale for Study Four

The fourth and final paper of this thesis is presented in Chapter Eight. Situational factors have been implicated in both the escalation and de-escalation of aggressive and violent behaviour and have formed the basis for some dynamic risk assessments, yet they are infrequently examined in relation to youth family violence. This represents a problematic gap given situational factors can provide information on when violence is most likely to occur, and be used to inform risk assessment, management, and intervention approaches. Content analysis was employed to examine police narratives of child-to-parent abuse (n = 82) by young people aged 10-24 years. This study addresses the third overarching aim of this thesis, which is to identify situational factors of police-reported incidents of youth family violence. Given the limited resources and time available to code police narratives, the scope of the paper was limited to the examination of child-to-parent abuse. While this is a limitation of the paper, the methodology and results can be used to inform future research.

The fourth study, titled '*The role of situational factors in child-to-parent abuse: Implications for assessment, management, and intervention*' was submitted to the *International Journal of Offender Therapy and Comparative Criminology* and returned with minor changes requested. These changes were made and resubmitted to the journal on 27th September 2022, with the current status of the paper being "Reviews returned – awaiting Editor assessment". The *International Journal of Offender Therapy and Comparative Criminology* is an interdisciplinary peer-reviewed journal that disseminates research examining factors related to crime and delinquency, with a focus on the treatment of offenders. The current impact factor of *International Journal of Offender Therapy and Comparative Criminology* is 1.86 (Clarivate Analytics, 2020). The 'Author Indication Form'

detailing the nature and extent of the candidate and co-authors' contributions to this published study is included in Appendix I.

The Role of Situational Factors in Child-to-Parent Abuse: Implications for Assessment, Management, and Intervention

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The authors have no conflicts of interest to disclose. This study involves secondary analysis of data from a larger project, as described in the method section. The specific ideas and data analyses presented in this work have not previously been published or presented.

Abstract

Situational factors are relevant to the initiation and maintenance of violent behaviour yet are infrequently examined in relation to family violence. Content analysis was used to conduct an inductive thematic analysis of police narratives to identify and quantify the occurrence of situational factors among Australian young people (10-24 years) reported to police for using violence towards a parent (n = 82). Descriptive information about demographics (e.g. age, sex), background characteristics (e.g., victimisation history, employment/school issues, mental health issues, neurodevelopmental conditions), and features of the index incident (e.g., type of aggression) were also extracted from police records. Interpersonal conflict and parental limit-setting were the most common situational antecedents of child-to-parent abuse, with additional situational factors including use of weapons, role of third parties, mental health concerns, and substance abuse issues. Families experiencing child-to-parent abuse showed heightened levels of intrafamilial violence and neurodevelopmental conditions. Implications for risk assessment, management and intervention are discussed.

Keywords: Family violence, youth, child-to-parent abuse, situation

The Role of Situational Factors in Child-to-Parent Abuse: Implications for Assessment, Management, and Intervention

Situational characteristics surrounding violent events are central to theories and models explaining aggression and violence in close relationships, such as the General Aggression Model (Anderson & Bushman, 2002), I³ Theory (Slotter & Finkel, 2011), and the Family Violence Event Process Model (Stairmand et al., 2021). In these theories, situational factors are implicated in the initiation and maintenance of aggressive behaviour and have the potential to either escalate or de-escalate violent incidents. The present study draws on the broader aggression and violence risk assessment literatures (e.g., Anderson & Bushman, 2002; Ogloff & Daffern, 2006) to define situational factors as features that are proximal (i.e., present within preceding 24 hours) to an aggressive/abusive event and either initiate and/or maintain aggressive behaviour through their influence on cognition, affect or arousal (e.g., intoxication, presence of weapons, third parties).

Situational Factors in the Child-to-Parent Abuse Literature

Child-to-parent abuse can be broadly defined to include physical, emotional, and psychological aggression enacted by a child towards their parent (Simmons et al., 2018). Bronfenbrenner's (1979) nested ecological model of development (adapted by Dutton, 1995) has been used as a framework to integrate findings from the child-to-parent abuse literature, highlighting the interaction of factors across multiple levels of a young person's ecology (e.g., individual, microsystem, and macrosystem levels; Simmons et al., 2018). This review of child-to-parent abuse using Bronfenbrenner's (1979) model by Simmons and colleagues (2018) provides a more robust discussion of the factors and contexts surrounding child-toparent abuse.

Additional research which may also be pertinent to examine in relation to child-toparent abuse – particularly with reference to the role of situational factors – include

Luckenbill's (1977) work on homicide as a situated transaction, and Polk's (1994) examination of the scenarios of masculine violence. Both Luckenbill (1977) and Polk (1994) highlight the role of dynamic interactions between the individual who engages in aggressive behaviour, the victim, and their broader environment. Such interactionist perspectives are infrequently applied to the child-to-parent abuse research yet highlight the importance of extending research beyond the individual who uses abusive behaviour to include their broader context.

While much of the research regarding the situational factors of child-to-parent abuse is fragmented and has been developed in a largely atheoretical manner, there is some consensus across studies as to which factors are relevant to abusive behaviour by young people toward parents. These include, verbal arguments (Eckstein, 2002; Evans & Warren-Sohlberg, 1988; Oviedo, 2019; Retford, 2016; Simmons et al., 2018), parental limit-setting (e.g., discipline, denial of a young person's request; Freeman, 2018; Simmons et al., 2018), substance use (Cottrell & Monk, 2004; Evans & Warren-Sohlberg, 1988; Freeman, 2018; Oviedo, 2019), mental health issues (Cottrell & Monk, 2004; Freeman, 2018; Laurent & Derry, 1999), and retaliation to the parent's use of violence (Purcell et al., 2014).

These situational characteristics often occur within a broader context of past family violence (FV) and conflict (Cottrell & Monk, 2004; Freeman, 2018; Purcell et al., 2014), persistent behavioural problems (Laurent & Derry, 1999; Purcell et al., 2014), poverty (Cottrell & Monk, 2004), poor school engagement (Cottrell & Monk, 2004; Purcell et al., 2014), substance abuse (Cottrell & Monk, 2004; Purcell et al., 2014), and mental health issues (Freeman, 2018; Purcell et al., 2014). Some factors, such as substance use and mental health issues (Cottrell & Monk, 2004; Freeman, 2018; Purcell et al., 2014), have both proximal and distal influence, as they may precipitate an abusive incident (e.g., in the case of

intoxication or acute mental health symptoms/distress), but also be related distally via their influence on a family environment already characterised by high stress and conflict.

While providing a useful starting point, this literature is limited in several key respects. First, most of the literature is decades old (Cottrell & Monk, 2004; Eckstein, 2002; Evans & Warren-Sohlberg, 1988; Laurent & Derry, 1999) or derived from doctoral dissertations which have not been subject to rigorous peer review (Eckstein, 2002; Oviedo, 2019; Retford, 2016).

Second, the more recent peer-reviewed studies appear to have identified situational factors for examination a-priori (Freeman, 2018), or situational factors were only briefly mentioned to contextualise other descriptive information (Purcell et al., 2014). This represents a substantial contrast to existing interactionist research conducted on other forms of violence (Luckenbill, 1977; Polk, 1994), which consider the dynamic interactions between the aggressive individual, the victim, and the features of their environment to be central features of analysis. Third, no known studies have examined situational factors related to child-to-parent abuse among young adults, despite clear evidence of child-to-parent abuse in this cohort (Snyder & McCurley, 2008). Finally, there is no peer-reviewed research applying knowledge of situational factors to the processes of youth FV risk assessment and intervention. While there is a need for more research identifying and describing the situational characteristics of child-to-parent abuse (Simmons et al., 2018), it is equally important that this information is then applied to inform risk assessment, risk management, and intervention approaches.

The role of situational factors in risk assessment

Reflecting their important precipitating role in aggression and violence, situational factors have been included in risk assessment instruments designed to assess risk for imminent violence in institutional settings. For example, tools such as the Dynamic Appraisal

of Situational Aggression (DASA; Ogloff & Daffern, 2006) and the Broset Violence Checklist (BVC; Woods & Almvik, 2002), include situational risk factors like 'irritability' and 'sensitivity to perceived provocation'. Yet, situational characteristics of violent events are not often explicitly considered in risk instruments for general violence (Douglas et al., 2013) and family violence (Hilton et al., 2004; Kropp & Hart, 2015) outside of scenario planning (Johnstone & Logan, 2012) and formulation (Hart & Logan, 2011).

Scenario planning is the process of imagining plausible future environments in which a given individual may engage in future violent behaviour, while formulation refers to a clinician's hypothesis about why an individual acted in a violent manner (Otto & Douglas, 2021). Both require clinicians to consider the role of situational characteristics of violent events (Johnstone & Logan, 2012; Otto & Douglas, 2021), yet there is little guidance as to what these factors are or how they might influence risk. Similarly, commonly used risk tools such as the HCR-20 (Douglas et al., 2013) and the Spousal Assault Risk Assessment (SARA; Kropp & Hart, 2015) ask clinicians to make judgements about the imminence of risk, however there is a lack of information about what factors relate to imminence.

The limited focus on situational factors in the FV field is somewhat surprising. Violence between family members invariably occurs within the context of an existing relationship. Background factors (e.g., previous victimisation, mental health concerns, school/employment issues, dysfunctional family dynamics) often exist in such relationships and provide an indication of who is relatively more or less likely to use FV over time. Yet, it is the highly changeable situational factors (e.g., intoxication, presence of a third party, interpersonal conflict) that are most relevant to *when* violence occurs (Vagi et al., 2013). The failure to consider situational factors has been identified as one of the most significant errors in judgement that is made when assessing and managing violence risk with youth (Borum,

2000). This suggests it is essential that the FV literature engage more with these kinds of risk factors.

The Present Study

This study adds to the limited literature examining situational factors involved in incidents of child-to-parent abuse among young people aged 10-24 years. Content analysis was used to conduct an inductive thematic analysis to identify the situational factors present within incidents of child-to-parent abuse reported to police in the Australian state of Victoria. Descriptive information (i.e., demographic details, background information, and characteristics of the abusive event) were also provided to allow comparison of the sample to other studies utilising police-reported child-to-parent abuse data.

Method

Sample

The present study uses the terms *young person who uses FV* and *FV-user*, recognising the need to consider young people as more than their behaviour, and to encourage a personcentred approach to conceptualisation of youth FV. This study involved the analysis of a sample of police narratives describing incidents of child-to-parent abuse in which a young person aged between 10 and 24 years was reported to police for being abusive towards a parent. The narratives were obtained from a broader sample of 500 narratives of FV police reports, half of which involved young people (aged 10-24 years; n = 250) who used FV. The 500 narratives were randomly selected from a population cohort of all police-reported FV incidents in the Australian state of Victoria during the four-month period between 1 September and 31 December 2019 (index period; N = 24,419), excluding cases where the FV-user's age was missing (n = 358, 1.50%). Victoria Police are the sole policing agency for the Australian state of Victoria, whose jurisdiction is roughly equivalent to the geographic size of the United Kingdom, with a population of 6.63 million (66.9% of whom live in the

capital city of Melbourne and 18.6% who are aged 10-24 years; Australian Bureau of Statistics, 2021).

Of the 250 narratives relating to young FV-users, 104 (41.60%) described incidents of child-to-parent abuse as the primary relationship in which abuse occurred. Of these, 22 were excluded because they were duplicate narratives (n = 2), the narrative was not provided to researchers (n = 5), large sections of the narrative were missing (which likely occurred when narratives were exported across to excel spreadsheets; n = 11), both the young FV-user and victim refused to provide information regarding the abusive event to police (n = 1), the report was incorrectly recorded as child-to-parent abuse (i.e., the narrative was recorded as child-to-parent abuse when the ages of the FV-user and victim suggested that parent-to-child abuse (i.e., child maltreatment) had in fact occurred; n = 2), or the victim and FV-user were misidentified multiple times throughout narrative (n = 1). This resulted in a final analytic sample of 82 child-to-parent abuse police narratives.

Data Source

The data used in this study were drawn from Victoria Police's Law Enforcement Assistance Program (LEAP) database, which records all contacts between the police and the public in Victoria, including cautions, charges, victims, and FV incidents. All incidents of reported FV are recorded by Victoria Police as a matter of policy, regardless of whether an individual was charged with an offence. Victoria Police determine whether to record a FV incident, using the Family Violence Protection Act 2008, which defines FV as:

Behaviour by a person towards a family member of that person if that behaviour is physically or sexually abusive; or is emotionally or psychologically abusive; or is economically abusive; or is threatening; or coercive; or in any other way controls or dominates the family member and causes that family member to fear for the safety and

wellbeing of that family member or another person (Family Violence Protection Act, 2008, s.5).

Child-to-parent abuse is a specifical relational form of family violence in which a young person aged 10-24 years old engages in abusive behaviour toward a parent or stepparent. Abusive behaviour by young people is defined in the present study with reference to the behaviours identified in the Family Violence Protection Act 2008.

Not all forms of FV identified under the Act constitute a criminal offence (e.g. no specific charges are associated with psychological abuse or coercion in Victoria at the time of publication). In Victoria, only half (n = 47468, 50.8%) of all FV incidents between July 2020 and June 2021 involved a criminal offence for which charges were laid (Crime Statistics Agency, 2021).

Whenever Victoria Police members respond to an incident of FV, they are required to complete a FV report, which involves recording characteristics of the incident, the victim, the person using FV, and their relationship. This FV report also contains 39 risk factors associated with future FV or lethal FV incidents (McEwan et al., 2019), in addition to other demographic and background information on victims and FV-users.

Police narratives pertaining to FV reports are completed by the responding police officer anytime they attend a FV incident. Police officers complete FV narratives using information from the young FV-user, the victim, any third parties, and any relevant prior police records. There is no template or formal structure prescribed for responding officers when completing a narrative of a FV report, meaning the recording of situational factors is not necessarily consistent across narratives. Given this, situational factors identified in the present study reflect the proportion of times police officers mentioned the presence of a given factor, not the proportion of times it was present.

Variable Definitions

Demographic and Background Characteristics

Descriptive data on demographic details, background information, and characteristics of the abusive event is provided to allow comparison of the sample to other studies of officially-recorded (i.e. administrative) child-to-parent abuse data. As this information was not always routinely provided in police narratives, it was obtained from a combination of risk factor items in the police FV reports and corresponding police narratives. Variables in the present study included: sex and age of the young FV-user and victimised parent; location of the incident (i.e. private residential or other location such as general public premises or school); socio-economic status (SES); whether the young person had prior police contact for non-FV offending or been abusive across more than one type of relationship; prior policereported FV victimisation; types of abusive behaviour used by young people at the index incident; mental health issues; substance abuse issues; financial issues; and neurodevelopmental conditions.

An approximation of socioeconomic status (SES) was coded from the young person's postcode recorded on the FV report using the corresponding decile of the Australian Bureau of Statistics (2018) Index of Relative Socio-Economic Advantage and Disadvantage (IRSAD; using Victoria-specific rankings). Three SES groups were created, with low SES comprising those in the lowest 20% SES (deciles one and two), middle SES comprising the 60% in deciles three to eight, and high SES being those in deciles nine and 10.

The types of abusive behaviour used by young people were extracted from FV reports, while examples of the various forms of physical abuse (e.g. punching, kicking) were drawn from police narratives. Physical abuse, verbal abuse and property damage were coded dichotomously (i.e., present or absent) and were not mutually exclusive.

Background information was obtained from a combination of risk factor items in the police FV reports and corresponding police narratives. History of police-reported

victimisation, including parent-to-child abuse, for young FV-users was coded dichotomously (i.e., yes or no) and represents whether a young person had ever been identified as the victim of a police-reported FV event at the time of index incident. Abusive behaviour by a young person across multiple relationships was also coded dichotomously (i.e., yes or no) to show whether a young person had ever (i.e., including both the index incident and past incidents) been reported to police for using FV within two or more different types of relationships (child-to-parent abuse, intimate partner abuse, sibling abuse, other family abuse).

Variables related to the presence of mental health issues, substance abuse, financial issues and unemployment/school truancy were recorded dichotomously based on presence, and were primarily ascertained using police questioning and discretion (i.e., asking the young person or victim if they use substances, noticing the young person appears substance affected at the time of the incident). Young people and victims did not require a formal diagnosis to be identified as experiencing mental health or substance abuse difficulties. As a result, the prevalence of these issues in the present study is likely to represent relatively gross estimates. Neurodevelopmental conditions (i.e. autism spectrum condition, attention deficit hyperactivity disorder, intellectual disability) and types of mental health diagnoses were identified solely from police narratives.

Situational Factors

Information pertaining to situational factors was extracted solely from police narratives. Situational factors were defined with reference to the violence and aggression literature (Anderson & Bushman, 2002; Ogloff & Daffern, 2006) and included those features which were deemed proximal (present within the preceding 24 hours) to the abusive event and which initiated and/or maintained aggressive behaviour by influencing cognition, affect, or arousal. These may include characteristics of the physical environment, characteristics of interpersonal interactions, presence of third parties, substance use around the time of the

incident, and the presence of weapons, among others. Further detail about the analysis of narratives to identify situational factors is provided in the Data Analysis section.

Procedure

All study data (i.e., FV reports and police narratives) were extracted from the LEAP database by authorised Victoria Police staff who were able to link person-level FV reports to the corresponding police narratives using unique numerical identifiers. Identifying details were removed before the data were provided to researchers for analysis.

Approvals and Ethics Clearances

The study was approved by the Swinburne University Human Research Ethics Committee (SUHREC: November 30, 2020, reference: 20204231-5617) and the Victoria Police Research Coordinating Committee (Project 968).

Data Analysis

Data analysis occurred in two steps. First, descriptive statistics summarising case demographic characteristics, background information, and features of the index FV incident were computed for the sample of 82 police narratives. To gauge sample representativeness, case characteristics (i.e., child/parent sex and age, socioeconomic status, and incident location) were also reported for the broader population of child-to-parent FV incidents from which police narratives were drawn.

Second, police narratives were analysed using content analysis methodology to identify and quantify the prevalence of situational themes relevant to the use of child-toparent abuse by young people. Themes were generated through inductive thematic analysis using a mix of manual coding and NVivo software. Police narratives were initially analysed through multiple readings by the lead author (A.S) and were read line-by-line to identify and label individual meaning units. A.S. regularly consulted with N.M. and T.M. regarding the accuracy of coding. Once themes and subthemes were finalised, A.S. provided coding

training to author M.S. for the purposes of determining inter-rater reliability of situational factors to ensure consistent frequency estimates. M.S. independently coded the situational factors from nine randomly selected narratives at the subtheme level. The presence of subthemes was agreed upon in 70.83% of cases (7 out of a total of 24 subthemes misidentified), while interrater reliability at the theme level was identified as 84.21% (3 out of a total of 19 themes misidentified).

Results

Descriptive and Background Characteristics

Table 1 displays the demographic characteristics of the sample relative to the broader population of youth (i.e., FV-user was aged 10-24 years at the time of the index incident) child-to-parent incident reports from which the sample was derived. Young people who used child-to-parent abuse were primarily males who engaged in abusive behaviour toward their mothers at a private residence. Those who were reported to police for child-to-parent abuse were most commonly aged 15-19 years old and resided in a low socioeconomic status area.

The broader background characteristics of the 82 police-reported child-to-parent abuse cases were also examined. Twenty-two percent (n = 18) of young people had been previously reported to police for abusive behaviour toward a different family member. More than one third (n = 28, 34.15%) of young people had a history of police-reported FV victimisation, with more than half (n = 15, 53.57%) of those young people being victims of police-reported parent-to-child abuse. Thus, incidents of police-reported child-to-parent abuse often occurred in the context of elevated levels of intrafamilial conflict and violence.

Mental health issues were common among both young people and victimised parents, with over half of all young people (n = 47, 57.32%), and more than one in five parents (n = 19, 23.17%) having such issues recorded by police. Anxiety and trauma-related conditions (n = 8) were most commonly reported among young people, followed by mood disorders (n = 8)

5), and psychotic disorders (n = 2). Further, more than one in ten (n = 11, 13.41%) young FVusers were identified in police narratives as having a neurodevelopmental condition (i.e., attention deficit hyperactivity disorder (ADHD), autism spectrum condition, or learning disability).

More than one third (n = 29, 35.37%) of young people were reported to have substance abuse issues, with 28.05% (n = 23) identified by police as likely to be substanceaffected at the time of the index incident. Cannabis and alcohol were identified in police narratives as the most frequently used substances by young people, with methamphetamines and benzodiazepines also mentioned. Nearly half of youth experienced schooling or employment issues (n = 14, 17.07%), and almost one quarter (n = 19, 23.17%) of families were identified as experiencing financial issues.

Characteristics of the Abusive Event

Most incidents (n = 74, 90.24%) occurred at a private residence, such as the family home, while nearly one in ten (n = 8, 9.76%) occurred in public, such as at a school, police station, or on the street. Approximately one in five (n = 18, 21.95%) incidents involved the young person engaging in physical abuse, including pushing, kicking, slapping, and punching. The most severe forms of violence identified in the narratives included strangulation and attempting to set the victimized parent on fire. Nearly three quarters (n =65, 79.27%) of incidents involved verbal abuse, and 17.07% (n = 14) involved property damage. Approximately one in ten (n = 8, 9.76%) FV reports noted that no violent or otherwise abusive behaviour was identified by police.

Situational Characteristics at the Time of the Index Family Violence Incident

Six overarching themes were derived from the content analysis of situational factors within police narratives. Interpersonal conflict (e.g., arguments) and parental limit-setting (e.g., making requests/placing constraints behaviour) were the most common immediate

antecedents of child-to-parent abuse. Additional situational factors which were identified included weapons, role of third parties, mental health issues, and substance abuse issues. Subthemes are underlined, while quotes are italicised.

Interpersonal Conflict

Interpersonal conflict was unsurprisingly a major theme, occurring in 73.29% (n = 61) of incidents. Conflict both preceded and maintained abusive events. A range of subthemes were observed under the umbrella of interpersonal conflict, which are described below.

<u>Verbal arguments</u> preceded over half (53.66%, n = 44) of all police-reported child-toparent abuse incidents and were the most common form of interpersonal conflict. Arguments often occurred in the context of parental limit-setting, or an argument between the young person and a third party (e.g., a sibling). In a small number of cases, arguments were noted to persist over a prolonged period (i.e., hours), with an eventual escalation in abusive behaviour, or parents calling police for support with de-escalation.

An argument has occurred this evening when [the victim] has had a go [i.e., yelled at] at the [young person] over some dirty dishes. [The victim] was out the front of her van when [the] argument has become physical with [the young person] pushing her forcefully with both hands caused her to fall backwards.

A less common but observable subtheme involved parents <u>intervening in existing</u> <u>conflict</u> (n = 4, 4.88%), often between the young person and their siblings, but occasionally between the young person and their intimate partner. Intervention by the victimised parent typically occurred in the context of a young person exhibiting abusive behaviour toward another individual. Often the young person diverted their attention from the third party and became either verbally or physically abusive toward the intervening parent. Rarely, the young person intervened in conflict between the parent and a third party and became abusive.

On this occasion, the [young person] became verbally abusive towards her youngest brother. The [young person] began kicking him, the [victim] attempted to remove her, which resulted in the [young person] turning her attention to [the victim]. The [young person] began kicking the [victim].

Parents were also observed attempting to <u>de-escalate the young person's behaviour</u>, precipitating abuse or further abuse. Some parents attempted to calm the young person down verbally or by not responding to them, while others would attempt to physically restrain the young person, either seeking to calm them down or due to fear of physical assault.

The [victim] stated that the [young person] had an argument with his sister, who had then left the premises. The [victim] stated that she had pinned [the young person] to the ground outside to keep him calm.

Attempts at de-escalation were observed to typically be ineffective, however this is likely the result of sampling bias. Those situations in which de-escalation attempts were successful would be unlikely to involve police intervention.

In some cases (15.85%, n = 13), <u>retaliation</u> by the victimised parent was observed, often in the context of the young person's persistent abusive behaviour. Physical and verbal forms of retaliation were identified within police narratives, with both forms typically associated with an escalation in abuse by the young person. This is not to say that the actions of victimized parents are to blame for their experiences of abuse, but rather to highlight that retaliation is a situational factor which may be associated with greater violence risk. Physical forms of retaliation by mothers and fathers included pushing the young person, grabbing the young person's clothing or hands, arming oneself with a weapon, or punching back.

The young person has then entered the kitchen and pulled out all the cupboard drawers and the cutlery has gone all over the floor. The [victim] then went inside and said to

the [young person] "is that all you've got?", which has infuriated the [young person]... a push and shove has then occurred... and the [victim] phoned police.

Limit-Setting

Issues pertaining to limit-setting were observed in half (50.00%, n = 41) of all narratives and was noted to be a key situational antecedent of child-to-parent abuse among those with neurodevelopmental conditions. Limit-setting typically involved the parent <u>making a request or placing constraints on behaviour of the young person</u>. This included limiting a young person's use of technology, making a request of the young person, intervening to stop interpersonal conflict or abusive behaviour, or preventing a young person from leaving the house due to a curfew or as a form of punishment.

The [victim] stood at the [young person's] door and demanded she clean her room up... the argument got heated between the [young person] and the [victim], with the [young person] attempting to push the [victim] out the bedroom to close the door.

Limit-setting frequently precipitated interpersonal conflict and was most often carried out by the victimized parent. <u>Denial of the young person's requests</u> by the victimized parent was associated with high levels of interpersonal conflict and often precipitated verbal abuse.

Limit-setting could also precipitate or escalate abuse when the <u>young person was</u> <u>asked to leave</u> because of their behaviour.

The [young person] got extremely agitated causing things to get tense so the [victim] told the [young person] to pack his stuff and leave. [The young person] threw his laptop through the window, smashing the window and punching the wall causing a hole.

Parents were observed to employ <u>police as disciplinarians</u> in situations where it appeared they felt incapable of setting limits with the young person, or where there had been persistent abuse and the parent felt unable to manage the behaviour any longer. Alternatively, parents were also observed to request police involvement where no abusive behaviour had in fact occurred but where they wanted support from the police to discipline or effectively communicate with the young person.

[The victim] stated [no] concerns for safety and called police as she wanted police to speak to the [young person] about getting the tattoo and the [young person's] drug use.

Substance Use

Substance use was described in 24.39% (n = 20) of police narratives as a situational characteristic, with a high level of co-occurring school/employment issues and mental health issues within these narratives. Substance use was identified as a <u>source of interpersonal</u> <u>conflict</u> and/or the focus of parental limit-setting. For example, in some instances, parents refused to provide the young person with money for fear it would be used to buy substances, while others raised concerns regarding a young person's friends due to their substance use.

The [victim] had told the [young person] that she can't have friends around due to their drug usage. This has caused the [young person] to become angry... The [young person] grabbed a knife from the kitchen and put it through one of the blinds in the dining area.

The effects of <u>intoxication or withdrawal</u> from substances featured in 12.20% (n = 10) of narratives. This differed substantially from what was recorded in FV reports, which identified more than one quarter (28.05%) of all youth as likely being substance-affected at the time of the index incident. Young people who were intoxicated at the time of the index incident were noted to experience broader issues with substance abuse which frequently occurred in the context of ongoing abusive behaviour and housing instability.

Rarely, <u>parental substance use</u> or intoxication was observed. This typically resulted in a reversal of the parent-child dynamic in which the young person attempted to set limits on their parent's behaviour, leading the parent to call police.

Presence/Involvement of Third Party

Third parties were commonly identified as present in incidents (n = 33, 40.24%) and included the young person's siblings or other parent, friends, intimate partners, other family members, or strangers. One in ten (n = 8, 9.76%) young people were noted to have displayed <u>abusive behaviour toward multiple family members</u> during the index incident. For example, the incident may have started with conflict between the young person and sibling, following which the parent intervened and became the primary victim recorded by police.

[The young person] and [the victim] have been arguing over the [young person] being on his iPad too much and [the young person] has then become verbally abusive towards her and brother of [the young person].

In cases where third parties were present, they were typically involved in <u>de-</u> <u>escalating conflict</u>, including restraining the young person to prevent further abusive behaviour. However, at times, the presence of a third party escalated a situation as their presence appeared to exacerbate the young person's emotional response to other situational variables (e.g., parental limit-setting).

The [victim] stood at the [young person's] door and demanded she clean her room and pick up clothing... The [young person] was embarrassed as her friend was present when her mother was telling her off. This got the [young person] upset so she pushed the [victim].

<u>Limit-setting by third parties</u> was observed in a minority of narratives (n = 7). Typically, this involved the third party/parties attempting to physically restrain or remove the young person to prevent violence, but also included asking the young person to leave or preventing them from entering the home. Rarely (n = 3), victimised parents explicitly called a third party for support in managing the young person's behaviour.

Weapons

Weapons featured infrequently in police-reported incidents of child-to-parent abuse, with 17.07% (n = 14) of narratives identifying the presence of a weapon. Three young people

were recorded by police as using a weapon and another three made explicit threats with the weapon (either to self or others). However, in most cases where weapons were present, they appeared to be items close at hand (e.g., knives were present if the incident occurred in the kitchen), with youth typically picking them up impulsively and quickly discarding them.

The [young person] grabbed a metal object and walked towards the family living room however no threats were made, and the object was not used to hit anything. The [young person] then got rid of the object and walked towards his room.

While some parents attempted to remove the weapon from the young person, others attempted to verbally de-escalate the situation, or the weapon prompted them to call police.

Mental Health and Threats of Self-Harm

In a minority of narratives (n = 4, 4.88%), young people who engaged in child-toparent abuse were recorded as having threatened self-harm during the index incident. Threats of self-harm often occurred in response to police being called.

The [young person] went to his room and locked the door... stating that he wanted to kill himself... [he stated he] made the threat as he didn't want the [victim] to call police.

Narratives rarely identified incidents as occurring in the context of poor parental mental health (n = 2, 2.44%) or due to a parent's concern for the young person's mental health (n = 1, 1.22%). Some young people were identified as not having taken medication prescribed for mental health concerns, leading to emotional dysregulation and parents' perception of an elevated risk of aggression.

Discussion

The present study sought to identify situational factors relevant to police-reported incidents of child-to-parent abuse. Interpersonal conflict (e.g., verbal arguments, parents intervening in existing conflict, retaliation) and parental limit-setting (e.g., young person being asked to leave, enforcing house rules) were the most commonly described situational

antecedents of child-to-parent abuse, which is broadly consistent with existing research from different jurisdictions, including the United States (Oviedo, 2019), Canada (Cottrell & Monk, 2004), and Australia (Freeman, 2018; Simmons et al., 2018). Substance abuse (e.g., intoxication, arguments about substances, parental substance abuse), third party involvement, presence of weapons, and mental health issues have also been identified as additional situational antecedents of child-to-parent abuse across various jurisdictions, including France (Laurent & Derry, 1999), Canada (Cottrell & Monk, 2004), Australia (Freeman, 2018), and the United States (Evans & Warren-Sohlberg, 1998).

Situational factors interact with the broader context of an individual's life, creating an environment in which young people with certain predisposing characteristics are more likely to engage in violent or abusive behaviour. Consistent with a wealth of previous research, families reporting child-to-parent abuse in this study experienced a confluence of predisposing background factors such as elevated levels of intrafamilial violence, mental health issues, substance abuse, neurodevelopmental conditions, education/employment instability, and broader life stressors (e.g., financial issues; Calvete & Orue, 2016; Cottrell & Monk, Simmons et al., 2018). These frequently coalesced to create heightened levels of familial stress, which is associated with increased risk of FV (Cottrell & Monk, 2004).

The heightened level of interpersonal conflict and difficulties with parental limitsetting observed within these high-need/high-stress familial environments are often explained in the context of dysfunctional communication patterns, coercive interaction sequences, or simply a lack of parenting skills (Simmons et al., 2018). Problematic familial interactions may be compounded by underlying psychological characteristics such as the hostile attributions, justification of violence, impulsivity, and diminished capacity for interpersonal problem-solving (Contreras & Cano, 2015; Orue et al., 2021; Simmons et al., 2018) displayed by young people who engage in child-to-parent abuse. These characteristics have in turn been

linked to the higher levels of victimisation and FV exposure among this group of young people (Contreras & Cano, 2015; Simmons et al., 2018).

Limitations and Future Directions

The use of police narratives as a data source presents several limitations. Narratives only capture situational factors the responding police officer thought relevant to the index incident, and so do not represent a comprehensive source of situational antecedents of youth FV events. Similarly, the quality and quantity of information contained in narratives is dependent upon the responding officer's capacity to interview the victim, young person, and any third parties. Despite these limitations, the narratives assisted in the identification of a common set of situational characteristics associated with the use of child-to-parent abuse.

The use of police records meant that only FV incidents that were officially reported were captured, limiting generalisability of the findings to community samples. While this is an important limitation, it does not significantly impact upon the importance of these results for the purposes of risk assessment and intervention by police or referral agencies who respond to police reports. The third limitation relates to the small sample size (n = 82) and focus on a single type of abusive relationship (i.e., child-to-parent abuse) employed within the present study. The small sample size may have prevented the full range of situational variables relevant to child-to-parent abuse from being captured and overlooks the interconnectedness of different forms of violence.

Future research would benefit from continuing to identify situational factors related to youth FV events using self-reported measures and longitudinal designs. More attempts should be made to incorporate multiple relationships of abuse (e.g., child-to-parent abuse, intimate partner abuse) within future research, as the adult FV literature indicates the event processes may be similar across relationships (Stairmand et al., 2021).

Implications for Theory

The situational factors identified in the present study are broadly consistent with those identified in family violence and aggression theories, including the Family Violence Event Process Model (FVEPM; Stairmand et al., 2021) and the I³ Theory (Slotter & Finkel, 2011). Consistent with the FVEPM, the results of the present study showed a proportion of young FV-users experienced issues with mental health and substance use, difficulties with communication and conflict-resolution, involvement of third parties, and a tendency for verbal arguments to escalate into FV. The role of these situational factors also appeared to mirror what is described in the FVEPM and the I³ theory, although it should be noted that the present study did not explicitly examine the function and role of the identified factors. For example, in the present study substance use was identified as a source of interpersonal conflict and a proportion of young people were intoxicated at the time of the index incident. This is broadly consistent with the FVEPM and the I³ theory, which note substance use can function as an instigating factor, facilitating the use of aggression-based strategies. Similarly, the findings pertaining to limit-setting in the present study lend support to the notion of 'goal obstruction' discussed as part of the I³ theory, which is identified as a dyadic factor which can instigate aggressive behaviour.

While these findings provide some support for the relevance of factors identified in the FVEPM and the I³ theory, there is a need for more detailed research focused on theorybuilding in the area of youth FV. Such research needs to not only focus on the relevance of certain factors, but also explore their temporal sequencing and interactionist effects.

Implications for Practice

In light of the limitations and need for future research, the findings of the present study have several important implications for risk assessment, risk management, and therapeutic intervention. First, many young people were noted to experience multiple needs concurrently, indicating risk management and intervention approaches need to be cognisant of the role and

impact of these co-occurring needs on behaviour. For example, those who use FV while intoxicated are likely to have concurrent mental health issues and school/employment issues which need to be addressed alongside their substance use and FV. Second, the overrepresentation of neurodevelopmental conditions emphasises the need for risk management and intervention approaches to be cognisant of this important responsivity issue.

Third, nearly one in ten young people were identified as being abusive toward multiple family members at the time of the index incident, while more than one in five had ever been reported to police for being abusive across more than one type of relationship (i.e., at the index incident and at least one other incident). This highlights the importance of services adopting a whole-of-family approach to treating and managing child-to-parent abuse, such as occurs in family systems therapy (Micucci, 1995). Additionally, those engaging in risk assessment with young people and affected families must ensure they adequately consider the young person's risk of abusing multiple family members, rather than focusing exclusively on the reported victim.

Fourth, understanding common situational antecedents of child-to-parent abuse can help clinicians with scenario planning, for which there is currently little guidance (DeMatteo et al., 2010). Identification of such factors assists in tailoring risk management strategies to the situational triggers of a young person's behaviour. This may enhance the likelihood interventions will be implemented and alter the chain of events (Rizvi & Sayers, 2020).

Scenario planning could in fact be aided by the application of functional analysis. Functional analysis provides insight into the drivers and consequences of violent behaviour and helps to identify risk management and intervention targets (McGarity et al., 2021). The findings of the present study can be used to provide guidance for clinicians engaging in functional analysis and scenario planning with young people who use FV Additionally, the results provided in this study may be particularly relevant for those who engage in scenario

planning but are not trained in the intricacies of functional analysis, or who work in settings where a thorough functional analysis is not possible (e.g., working with those with significant cognitive impairment, lack of time or resources).

Fifth, youth FV research may benefit from drawing on the inpatient aggression literature, which has a wealth of information on how to de-escalate, set limits, and communicate with inpatients, as well as implement appropriate risk management strategies (Maguire et al., 2019; Slaatto et al., 2021). For example, the denial of requests by staff and an unwillingness of patients to follow directions are identified in the inpatient aggression literature to be key situational antecedents of violence (Ogloff & Daffern, 2006), and appear somewhat analogous to the issues with parental limit-setting observed in the present study. Similar approaches may even be applicable to managing and intervening with other forms of youth FV, including aggression toward carers in the out-of-home care system.

Conclusions

The findings of this study highlight the importance of considering the situational characteristics of child-to-parent abuse and their relevance to risk assessment, risk management, and intervention. Content analysis of police narratives pertaining to incidents of child-to-parent abuse highlighted elevated levels of interpersonal conflict and issues with parental limit-setting as the most common situational factors involved in this form of FV. Consistent with the extant research, child-to-parent abuse was found to occur among families experiencing a confluence of predisposing background factors, highlighting the importance of considering and addressing multiple areas of need (i.e., mental health, substance abuse, education/employment instability) concurrently when assessing risk and intervening with affected youth and families. Additionally, this is one of few studies highlighting the importance of considering neurodevelopmental conditions as a responsivity issue when assessing and managing child-to-parent abuse. Important lessons in managing and

intervening with youth FV may be derived from the inpatient aggression literature, which has a robust literature base on how to communicate, de-escalate, and set limits with individuals at heightened risk for aggression.

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Table 1

Demographic characteristics of all cases of child-to-parent abuse in the total dataset (N =

		Total Dataset of CPA ^a	Narrative Dataset
		N (%)	n (%)
n		2029	82
Characteristics of Young Person			
Sex	Male	1357 (66.88)	57 (69.51)
	Female	672 (33.12)	25 (30.49)
Age	10-14 years	400 (19.71)	17 (20.73)
	15-19 years	979 (48.25)	43 (52.44)
	20-24 years	650 (32.04)	22 (26.83)
Lowest 20% SES		616 (30.36)	24 (29.27)
Prior Non-Family Violence	Generalist	955 (47.07)	36 (43.90)
Offending	Family-only	1074 (52.93)	46 (56.10)
Characteristics of Victimised Parent			
Sex	Female	1546 (76.20)	60 (73.17)
	Male	480 (23.66)	22 (26.83)
Age (<i>M</i> , <i>SD</i>)		47.12 (8.31)	47.55 (7.18)
Characteristics of the Incident			
Location of index incident	Private Residentia	al 1860 (91.67)	74 (90.24)
	Other location	169 (8.33)	8 (9.76)

²⁰²⁹⁾ and those in the narrative dataset (n = 82)

aCPA = Child-to-parent abuse

^bOther location refers to any non-private residence (e.g. general public premises, educational

premises, legal premises, public housing premises)

PART III: INTEGRATED DISCUSSION Chapter Nine: Integrated Discussion

9.2. Overview of the Research

The aims of this thesis were three-fold. First, the thesis sought to advance knowledge of the characteristics related to police-reported youth family violence, including how these characteristics varied according to age and history of prior offending. The second aim was to improve understanding of recidivism risk and risk assessment with young people reported to police for using family violence. The third aim of the thesis was to identify situational factors relevant to police-reported incidents of youth family violence. To this end, all youth family violence incidents (i.e. involving a young person aged 10-24 years identified as using family violence) reported to police in the Australian state of Victoria during the four-month period between 1 September and 31 December 2019 (index period; N = 5014) were examined.

The first aim was addressed across studies One, Three and Four (Chapters Five, Seven, and Eight), respectively. The first study involved an examination of how the characteristics of young family violence-users differed according to the key developmental periods of early adolescence (10-14 years), late adolescence (15-19 years), and young adulthood (20-24 years). The third study examined how the characteristics of young people and their use of family violence varied according to whether they were identified as generalist youth (i.e., they had been reported to police for both family violence and other offending), or family-only youth (i.e., had only ever been reported to police for using family violence). The fourth study identified situational characteristics of youth family violence (specifically, childto-parent abuse) and their implications for practice.

The second aim was addressed across studies Two and Three (Chapters Six and Seven), respectively. The second study explored the base rate of police-reported family violence recidivism among young people and validated the Victoria Police Screening Assessment for Family Violence Risk (VP-SAFvR; McEwan et al., 2019) for use with young

people aged 10-24 years. Study three explored the relationship between past non-family violence offending (and diversity of such offending) and risk of family violence recidivism. Together, these studies improved understanding of youth family violence recidivism risk and risk assessment.

The third aim of this thesis was addressed in the fourth study which, as noted, identified key situational characteristics of child-to-parent abuse incidents reported to police, and explored implications of the findings for practice. Due to the limited resources and timeframe associated with a doctoral thesis, the sample of narratives that were analysed was limited to those in which child-to-parent abuse was identified as the primary relationship of abuse.

9.2. Overview of Main Findings

The following section summarises the key findings of the four studies contained in this thesis (Chapters Five to Eight) to orient the reader before proceeding to the integrated discussion.

Chapter Five provided a descriptive analysis of Australian young people reported to police for using family violence according to their age at the time of the index incident (i.e., 10-14 years, 15-19 years, 20-24 years). Results suggested that young people who used family violence were typically male, targeted female victims, experienced high levels of family violence victimisation, and were disproportionately from low socioeconomic areas and rural/regional locations. Mental health issues were consistently elevated (i.e., 41-43%) across all age groups. Substance abuse and issues with school truancy/unemployment were significantly higher among those aged 15 years and over, whereas childhood police-reported family violence victimisation (aged 0-11 years) was elevated among those aged 15 years and over, Intimate partner abuse was significantly more common among those aged 15 years and over,

while there was a higher proportion of 10-14-year-olds who engaged in child-to-parent abuse. Prevalence of family violence recidivism was similar across all age groups.

Chapter Six examined the six-month base rates of youth family violence recidivism and described a validation study which explored the discriminative and predictive validity of the Victoria Police Screening Assessment for Family Violence Risk (VP-SAFvR) for youth aged 10–24 years. The 6-month base rate of family violence recidivism among 10-24-yearold Australian youth was 24.24% for same-dyad recidivism and 35.31% for any-dyad recidivism. Same-dyad recidivism was highest among young people aged 10-14 years (26.81%) compared to those aged 15-19 years (24.69%) and 20-24 years (23.31%), while any-dyad recidivism was highest among youth aged 15-19 years (37.17%), compared to those aged 10-14 years (34.23%) and 20-24 years (34.18%).

The VP-SAFvR demonstrated moderate discriminative validity (Area Under the Curve [AUC] = .65) for youth aged 10-24 years who were reported to police for a family violence incident. There was also comparable discriminative validity across age groups (AUCs = .64–.67), gender (AUCs = .63–.65), and relationship dyads (i.e., child-to-parent abuse, sibling abuse, intimate partner abuse; AUCs = .62–.65). Predictive validity was adequate at a threshold score of four for 10-24-year-olds, however examination of age-based subgroups indicated a threshold score of three improved sensitivity among those aged 10-14 years.

The results provided in Chapter Six represent the first attempt to empirically validate a family violence risk assessment tool for use with young people reported to police for using family violence according to key developmental periods (i.e., 10-14 years, 15-19 years, 20-24 years). The results highlight the importance of validating tools and risk thresholds according to the developmental stage of young people, although indicate that a single actuarial tool developed from population-level data can be effective for both young people and adults alike.

Chapter Seven explored differences in the characteristics and recidivism risk of young people reported to police for family violence with a history of prior offending (generalists) and those only known to police for using family violence (family-only). Generalists were found to display a significantly elevated level of lifetime family violence behaviour (i.e. ever engaged in high severity family violence, ever abusive across more than one relationship, ever breached court orders), experienced a higher level of criminogenic (i.e., substance abuse, school/unemployment issues) and non-criminogenic (i.e., mental health, family violence victimisation) need, and were more likely to engage in family violence recidivism within six months.

A greater diversity of non-family violence among generalist youth was significantly associated with a shorter time to family violence recidivism, however the magnitude of this dose-response relationship substantially declined once a young person had engaged in three or more different types of non-family violence offences. It was hypothesised that this may be indicative of a ceiling effect in level of criminogenic need and/or antisocial tendencies in which they no longer cumulatively add to an individual's risk of future family violence.

The results of Chapter Seven suggest generalist and family-only youth represent distinct subgroups of young family violence-users and provide support for generalist youth to be prioritised for assessment and intervention. The findings indicate a need for police and services to reconceptualise how youth family violence is addressed and managed, such as adopting a specialised case management with assertive outreach approach which addresses individual needs and manages ongoing risk issues.

Chapter Eight described a content analysis of police narratives in which situational factors relating to incidents of police-reported child-to-parent abuse were identified and quantified. Interpersonal conflict (e.g., arguments) and parental limit-setting (e.g., making requests/placing constraints behaviour) were the most common situational antecedents of

child-to-parent abuse, with additional situational factors including: the use of weapons, role of third parties, mental health concerns, and substance abuse issues. Findings indicated a high level of intrafamilial violence and neurodevelopmental issues (attention deficit hyperactivity disorder (ADHD), autism spectrum disorder, or learning disability) among families experiencing police-reported child-to-parent abuse.

Implications of the results for risk assessment, risk management, and intervention were discussed. Young people were noted to experience multiple needs concurrently, indicating risk management and intervention approaches would likely need to address several issues simultaneously. Similarly, the over-representation of neurodevelopmental disorders indicates a need for clinicians to be cognisant of responsivity issues when working with young family violence users.

Taken together, the findings of this thesis have advanced current knowledge of the characteristics of police-reported youth family violence, improved understanding of family violence recidivism risk and risk assessment for this cohort, and increased knowledge of the situational factors relevant to youth family violence. The discussion below integrates the findings of the four studies (Chapters Five to Eight) and discusses implications for theory, and for risk assessment, risk management, and intervention.

9.3. Integrated Interpretation of Findings

The following section will present an integrated interpretation of the findings, focusing on the key themes that became apparent across the four studies and linking them back to the three overarching aims of the thesis. Key themes arising from the studies are: 1) the importance of accounting for age in the assessment and management of youth family violence, 2) the interconnectedness of different relational forms of family violence and other offending behaviour, and 3) the importance of identifying situational antecedents of youth family violence in assessment and intervention.

9.3.1. The Importance of Age in the Assessment and Management of Youth Family Violence

The findings of the present thesis highlight that the age of the young family violenceuser at the time of the index incident is associated with variations characteristics of young people and their use of family violence. Similarly, results suggest a single risk assessment tool can be valid for use with young people of different developmental stages, with the potential for some improvement of predictive validity through the application of an adjusted risk threshold for some age groups. These findings will be discussed with reference to the broader family violence and youth offending literature, while implications for risk assessment, management, and intervention will be explored in 9.5.2.

The proportion of young people who engage in family violence, and family violence recidivism, provides information about the base rate of behaviour, which is important for the process of risk assessment. 'Base rate' refers to the prevalence of a given type of behaviour over a particular period (e.g., six months) and is important when estimating the likelihood of a behaviour occurring (Borum, 2000). Results of the first paper showed 11.85% of the total sample was comprised of those in early adolescence (10-14 years), compared to 37.44% and 50.72% for those in late adolescence (15-19 years) and young adulthood (20-24 years) respectively. This increase in proportion of young family violence-users with age is consistent with existing youth family violence literature (Boxall & Sabol., 2021; Phillips & McGuinness, 2020; Snyder & McCurley, 2008). In contrast, prevalence of family violence recidivism remained similar (between 34-37%) across each age group, which is inconsistent with the broader youth family violence (Phillips & McGuinness, 2020) and offending literature (Kleevan et al., 2022; Sentencing Advisory Council, 2015). This may be due to the way recidivism is defined in the present thesis (i.e., any future police contact for using family violence) compared to the broader literature (i.e., charge or arrest data). The results highlight

that, while fewer young people in early adolescence are likely to engage in family violence, those who are reported to police again within six months display a similar risk of future family violence as their older counterparts. These findings extend upon the existing literature by providing the first developmentally-specific base rates for youth family violence and recidivism, which are important for the creation and validation of developmentally sensitive risk assessment tools.

Risk assessment instruments must be validated with reference to the age and period of development of the young person being assessed (Borum, 2000). Although youth-specific risk assessment tools have been developed for general violence (Borum et al., 2006; Hoge & Andrews, 2006), and it is suggested a youth-specific risk assessment tool may need to be developed for adolescent intimate partner abuse (Shaffer-McCuish, 2020), results of the present thesis highlight a single risk assessment tool may be effective for both adult and youth family violence-users alike. It is important however that risk tools be validated using classification statistics (i.e., sensitivity, specificity, PPV, NPV) with reference to the age of young people, as results of the second paper in this thesis suggest the validity of the tool is improved for those in early adolescence (10-14 years) when a lower risk threshold is applied.

The improved performance of the VP-SAFvR for early adolescent youth at a lower risk threshold may be due to variation in the static and dynamic characteristics of young family violence-users (van der Put et al., 2011, 2012). Higher rates of substance abuse, school truancy/unemployment, and prior non-family violence offending (which can be viewed to represent broad, non-specific proxies for the criminogenic need domains of substance use, education/employment, and history of antisocial behaviour; Bonta & Andrews, 2016) were observed among those in late adolescence (15-19 years) and young adulthood (20-24 years), compared to those in early adolescence (10-14 years). These results, as well as the reduced sensitivity of the VP-SAFvR for those in early adolescence, may be somewhat explained with

reference to the "age-risk factor paradox" (van der Put et al., 2011, p.258) from the general youth offending literature.

The paradox suggests criminogenic needs are least prevalent, but most predictive of recidivism, among those aged under 14 years old, yet are most prevalent (but least predictive of recidivism) among those aged 14 years and older (van der Put et al., 2011). It is possible that early adolescent family violence-users have simply had less time and opportunity to accrue the same number of criminogenic needs as those aged 15 years and older, but that the criminogenic needs which are present have a significant impact on their recidivism risk. As a result, they are more likely to receive a lower score on risk instruments such as the VP-SAFvR but display a similar level of family violence recidivism as their older counterparts. A lower risk threshold is therefore likely required for those in early adolescence to compensate for these youth displaying fewer risk factors but a similar level of recidivism.

The age of a young person at the time of the index incident is also relevant to risk assessment and management through its relationship with responsivity. Responsivity factors which were observed to be consistently elevated across all age groups included male sex (Freeman, 2018; Simmons et al., 2018; Snyder & McCurley, 2008; Walsh & Krienert, 2007), living in a low SES area or rural/regional location, and experiencing mental health issues. Young family violence users have been shown to experience more mental health issues than their adult counterparts (Phillips & McGuinness, 2020) and are disproportionately from both rural/regional areas and low SES backgrounds (Phillips & McGuinness, 2020).

The presence of accessibility needs and experience of police-reported family violence victimisation are additional responsivity factors pertinent to young people who engage in family violence and which vary according to age. Those in early adolescence were more likely to be reported as experiencing accessibility needs (i.e., issues with mobility, vision, hearing, communication, memory, understanding) and childhood (aged 0-11 years) police-

reported family violence victimisation. The higher level of accessibility needs may indicate disability and neurodevelopmental disorders to be a key responsivity issue for early adolescent family violence-users, while the latter finding (i.e., regarding childhood victimisation) is broadly consistent with research demonstrating a connection between childhood victimisation and accelerated onset of offending (Jolliffe et al., 2017; Papalia et al., 2017). In contrast, older youth (aged 15-24 years) displayed a higher prevalence of any family violence victimisation (occurring at any age, but most commonly occurring 12 years and older) compared to their younger counterparts (10-14 years). This is likely reflective of the longer period of time in which they had to be a victim of police-reported family violence and may indicate a higher level of bidirectional violence present in cases of youth intimate partner abuse.

Taken together, the findings of this thesis highlight the presence of both age-related similarities and differences in the characteristics of young family violence-users. They demonstrate the importance of thinking about developmental stage when assessing youth family violence and validating risk assessment tools against data collected from young people in different developmental periods. The results indicate age-related variation in the needs and responsivity factors of young people who engage in abusive behaviour. These findings have implications for theory, risk assessment, risk management, and intervention, which are discussed in section 9.5.2.

9.3.2. Recognising the Interconnectedness of Family Violence and Offending Behaviour When Assessing and Managing Risk

Over half (52.00%) of all young people who engage in family violence do so as part of a broader pattern of offending behaviour, and more than one quarter (28.30%) of all youth are abusive across more than one type of relationship (e.g. child-to-parent abuse, intimate partner abuse). Therefore, it is sensible to consider offending and the multiple relationships of

abuse which constitute family violence as part of a broader behavioural pattern when responding to youth family violence (Boxall & Sabol., 2021). This is particularly true when assessing and managing risk, as diversity of offending and family violence behaviour is associated with a higher risk of future family violence and greater level of need in both young people and adults (Chan et al., 2021; Moulds et al., 2019; Petersson & Strand, 2020; Verbruggen et al., 2020, 2021, 2022). This section will first consider the interrelationship between youth family violence and other offending behaviour in relation to level of risk and need, then examine the co-occurrence of the various relational forms of youth family violence, and finally explore the co-occurrence of family violence use and victimisation among young people. This will be achieved by drawing on the findings of the four papers.

Recent longitudinal research with a population cohort of young Dutch people has shown that those with a greater diversity of police contact display a substantially elevated risk of future family violence (Verbruggen et al., 2022). Moreover, existing research with adults has demonstrated that those with more diverse offending behaviour are more likely to engage in abuse of multiple family members, have higher level of criminogenic (e.g. substance abuse, education/employment issues) and non-criminogenic (e.g. mental health issues, history of victimisation) need (Cantos et al., 2015; Coghlan & Millsteed, 2017; Petersson & Strand, 2020; Petersson et al., 2019), and an elevated rate of family violence recidivism (Cantos et al., 2015; Petersson & Strand, 2020). The results of the third study are wholly consistent with these findings from adult samples and demonstrate that diversity of offending behaviour should similarly be a consideration when assessing risk and undertaking risk management with young people who use family violence.

The results of the third study also highlight that, even among generalist youth, there is differentiation in risk, with those with diverse offending patterns being substantially more likely to come to police attention for using family violence again in the short-term (i.e.,

within six months of the index incident). Generalists who engaged in more diverse patterns of offending displayed a shorter time to family violence recidivism, however this significant dose-response relationship ceased to be observed once an individual had come to police attention for engaging in three or more different offence categories. This may be indicative of a ceiling effect in the impact of criminogenic need and/or antisocial tendencies on recidivism once an individual reaches this threshold. The finding that offence diversity among young family violence-users is related to recidivism risk is consistent with one of the central eight risk factors highlighted in the RNR model (Bonta & Andrews, 2016) – history of antisocial behaviour – and also notably reflects one of the key risk factors from the Psychopathy Checklist – Revised (Hare, 2001, 2003), which is diversity of offending. This finding pertaining to the importance of offence diversity is unsurprising but has implications for resource allocation in agencies responsible for immediate risk management, such as police (discussed in section 9.5.2).

Despite their relative lack of traditional criminogenic needs, the rate of recidivism among family-only young people was still high, with over one quarter (26.53%) returning to police attention for using family violence with six months of the index incident. There is a lack of research, among both adult and youth samples, examining the factors related to recidivism among family-only individuals. The literature highlights that family-only adults are more "socially well-adjusted" (Petersson & Strand, 2020, p. 378) than generalists, and display fewer risk factors for recidivism.

However, the results of the third study suggest that, while traditional criminogenic needs may be less applicable to family-only youth than their generalist counterparts, problematic family dynamics may perpetuate ongoing abusive behaviour among this cohort. The findings of this thesis show family-only youth display higher levels of police-reported family violence victimisation in childhood (aged 0-11 years) compared to generalists.

Similarly, a higher proportion of family-only youth engaged in child-to-parent abuse and sibling abuse at the index incident, while a higher proportion of generalists engaged in abusive behaviour toward intimate partners and other family members (e.g. grandparents, cousins). This may suggest that the drivers of abusive behaviour and family violence recidivism among family-only youth may be more readily located within the immediate family unit (such as the presence of dysfunctional family dynamics), while the drivers of family violence among generalists are likely more diffuse. Further research examining the causes of abusive behaviour by family-only youth is required, with results of the present thesis suggesting the family domain to be an important area for exploration.

This research supported Hamby and Grych's (2013) contention that violence in different contexts is more similar than it is different, with violence toward different family members frequently co-occurring in the study population. Findings from the first, third and fourth empirical studies (Chapters Five, Seven, and Eight) showed that more than one quarter (28.30%) of young people were reported to police for using abuse within two or more relational dyads. Given family violence is significantly under-reported (Fitz-Gibbon et al., 2018; RCFV, 2016), it is possible that the percentage of young people who are abusive across more than one relationship is substantially higher than the figure reported here.

Additional figures from the present thesis show more than one in ten (11.07%; found by subtracting same-dyad recidivism from any-dyad recidivism) young people engaged in family violence recidivism towards to a different person than was involved in the index incident, while one in ten (9.76%) youth were identified in police narratives of child-toparent abuse as being abusive toward multiple family members during the index incident. These results represent a departure from current academic conceptualisations of youth family violence as separate relational phenomena that are researched independently and highlight the

need to consider the different forms of abuse as part of a broader behavioural pattern (Hamby & Grych, 2013).

Scholars also highlight the importance of recognising the high co-occurrence of violence victimisation and perpetration (Hamby & Grych, 2013), including among young people who engage in family violence (Farrington & Ttofi, 2021). Results of the first paper identified 40% of young people aged 10-24 years who use family violence had ever been the victim of police-reported family violence, while results of the third study show 19.43% of generalists and 6.28% of family-only youth have been the victim of police-reported family violence, while results of the third study show 19.43% of generalists and 6.28% of family-only youth have been the victim of police-reported family violence across more than one type of relationship. Although the family violence literature often categorises individuals as 'perpetrators' and 'victims', the results of the present thesis support extant research calling for greater recognition of the interconnectedness of victimisation and perpetration (Farrington & Ttofi, 2021; Hamby & Grych, 2013). This recognition will also assist in the adoption of a more developmentally-informed approach to youth family violence risk assessment and management, as exposure to abuse and maltreatment are known antecedents to interpersonal violence (Hamby & Grych, 2013) and common among young family violence-users (Phillips & McGuinness, 2020; Simmons et al., 2028; Jennings et al., 2017).

Failure to account for the co-occurrence of abuse in different family relationships, the link between family violence and other offending behaviour, and the false dichotomy of labels such as 'perpetrator' and 'victim', ultimately impedes the translation of research into practice. Police and other services are confronted with individuals that rarely fit into the narrow definitions of violence and abuse outlined in research. Most services in Victoria (i.e., the jurisdiction in which the data for this thesis was drawn) which address youth family violence recognise abusive behaviour often occurs across multiple relationships (Boxall et al., 2020; Fitz-Gibbon et al., 2018). However, because research does not typically investigate

family violence in this way, it can be difficult for services to draw on evidence that is adequately representative of their service. It is therefore essential for researchers to recognise and account for the intersections between various forms of violence, abuse, and offending, to ensure the literature can be used to inform practice.

9.3.3. The Importance of Identifying Situational Factors When Assessing and Managing Youth Family Violence

Reflecting the majority of the violence risk assessment literature, the first three studies of this thesis predominantly focused on risk factors related to the young person using family violence and their history. Such individual factors are useful for understanding *who* is at relatively increased risk for using violence (Vagi et al., 2013), with those with more risk factors being at greater risk. The results of the first, third and fourth papers (Chapter Five, Seven, and Eight, respectively) support existing research identifying broader contextual factors, such as mental health issues (Freeman, 2018; Simmons et al., 2022; Vagi et al., 2013), conflictual family dynamics (Simmons et al., 2018), intrafamilial violence (Jennings et al., 2017; Simmons et al., 2018), neurodevelopmental disorders (Campbell et al., 2020), substance abuse (Cottrell & Monk, 2004; Evans & Warren-Sohlberg, 1998; Freeman, 2018), and schooling issues (Armstrong et al., 2018; Boxall et al., 2020) as being relevant to policereported youth family violence.

However, individual risk factors are less able to inform judgements about *when* violence or abuse is likely to occur or escalate (Vagi et al., 2013). It is the interaction of the individual with the surrounding situation that determines whether risk will be realised at a particular time. Therefore, recognising situational risk factors is important for identifying when violence or abuse is most likely to occur. The fourth paper in this thesis took this specific focus by examining situational factors associated with police-reported incidents of child-to-parent abuse. The results showed interpersonal conflict (i.e. verbal arguments, parent

intervening in existing conflicts, attempts to de-escalate behaviour) and parental limit-setting (i.e. enforcing rules, denial of a young person's request, asking young person to leave, using police as disciplinarians) to be the most common antecedents of this form of abuse. Issues with communication (Pagani et al., 2004; Pagani et al., 2009; Simmons et al., 2018), limit-setting (Freeman, 2018; Simmons et al., 2018), and interpersonal problem-solving (Contreras & Cano, 2015; Simmons et al., 2018) are known characteristics of families experiencing child-to-parent abuse. However, the results of the fourth paper extend upon such knowledge by identifying these as key situational triggers of abusive behaviour among police samples, highlighting the relevance of the family/parenting domain of criminogenic need (using the RNR model) in cases of child-to-parent abuse (Bonta & Andrews, 2016), and providing implications for risk assessment, risk management, and intervention.

Freeman (2018) similarly identified situational triggers within the family/parenting domain as part of their analysis of police narratives involving adolescents charged with youth family violence (i.e. child-to-parent abuse, sibling abuse, other abuse), however did not overlay an RNR framework as part of their research. Freeman (2018) emphasised the importance of apparently commonplace interactions – such as disciplinary action by a parent, or a parent's refusal to comply with a demand – in the use of family violence by young people. Explanations for the relationship between such interactions and their escalation to abuse have highlighted the role of hostile attributions (Contreras & Cano, 2015), aggressive and antisocial cognitions (Simmons et al., 2022), diminished capacity for interpersonal problem-solving (Simmons et al., 2018), elevated levels of emotion dysregulation (Simmons et al., 2018), and dysfunctional communication patterns (Lopez-Martinez et al., 2019; Pagani et al., 2004). The communication, cognitive, and self-regulatory difficulties of young family violence-users appear to be further compounded among young people presenting with neurodevelopmental disorders and situationally pertinent substance abuse (e.g. intoxication)

and mental health issues (e.g. emotion dysregulation, threats of self-harm), resulting in the escalation of commonplace interactions in abusive incidents (Cottrell & Monk, 2004; Freeman, 2018).

Understanding how situational (e.g. limit-setting, interpersonal conflict, substance abuse, mental health, third parties) and background (e.g. substance abuse, mental health issues, history of family violence victimisation) factors are related to incidents of youth family violence assists in undertaking a functional analysis. There is currently limited information regarding the situational characteristics related to youth family violence, making the fourth paper of this thesis a significant contribution to the literature. The study provides nomothetic data about the kinds of situations that are likely to produce abusive behaviour toward parents, which can help to form hypotheses which are tested in functional analyses. It's also a way of guiding nomothetic (i.e., group-level data) knowledge to the assessment of idiographic (i.e., individual-specific data) situations. For example, a particular situation (e.g. arguments) might be identified as a common trigger for youth family violence, but the influence of that situation on violent behaviour might slightly differ for each young person, so treatment may also be slightly different.

9.3.4. Summary

The three overarching aims of the present thesis were addressed across the four studies. The characteristics of youth family violence, including the role of age and prior offending, need to be used to inform risk assessment, risk management, and intervention approaches with this cohort. These approaches should be developmentally-sensitive to the needs of young people of different ages, recognise the higher level of risk and need associated with more diverse offending and family violence behaviour, and consider the role of situational factors in the generation of abusive events. Recognition of these factors will improve the capacity of clinicians and police to tailor risk assessment, risk management, and

intervention approaches to the needs of people and their families. Similarly, the identification of family violence recidivism base rates, the validation of a key family violence risk assessment tool for use with young people, the VP-SAFvR (McEwan et al., 2019), and the identification of those at higher risk of family violence recidivism (i.e. generalists), has assisted in improving knowledge of youth family violence risk assessment and management.

9.4. Limitations of the Research

The limitations of the four studies in this thesis will only be discussed briefly in this section given they have been reviewed in detail within each study (Chapters Five to Eight). The primary limitation of the present research is its reliance on official police records, which means the findings may not generalise to youth family violence occurring in the community without police involvement. Similarly, official records typically capture the more acute end of family violence (Johnson, 2006) rather than the full spectrum of behaviour or variation in risk and need of young people who engage in family violence. Although these are indeed limitations, the results of this thesis are targeted to audiences in which officially reported family violence is most relevant, including police, youth justice, and other community services. Similarly, rather than relying solely on police charges or convictions, the results of this thesis are based on police-reported incidents of youth family violence, allowing for the capture of a potentially more diverse sample of young people.

The second key limitation is the reliance on police questioning and discretion to ascertain the prevalence of risk factors, including mental health and substance abuse issues, school truancy/unemployment, presence of disabilities, history of abusive behaviours. For example, mental health issues may be coded as present by the responding police officer if the victim or young family violence user affirms they have a mental health issue, if the officer observes behaviour they believe to be consistent with a mental health issue, or if there is a warning flag on the police system identifying the individual as having a significant mental

health issue (e.g. psychosis). Similarly, a history of threatening others may only be coded as present if the young person or victim acknowledges past threats to the police officer, or if the officer is aware of previous incidents involving such threats. The results of the present study, therefore, are likely to be indicative of relatively gross estimates of the prevalence of these issues. The strength of this approach is that the data is drawn from existing practice, and so results can be immediately generalised back into practice because they are based on the kind of information that is available to police to assess level of risk and need (McEwan et al., 2019; Spivak et al., 2021).

The third key limitation is the assessment of family violence recidivism using a sixmonth follow-up time to assess discriminative and predictive validity of the VP-SAFvR and establish base rates of youth family violence recidivism. While previous research has demonstrated that most family violence recidivism occurs within this timeframe (Stansfield & Williams, 2014; Morgan et al., 2018), the results of analyses related to recidivism should not be extrapolated beyond six months.

The fourth limitation involved the lack of reliable data regarding race and ethnicity. Given the concerns regarding race bias in risk assessment (Eckhouse et al., 2019), this represents a notable shortcoming of the present thesis. Unfortunately, there is not currently a reliable way for Victoria Police to ascertain the ethnicity of individuals involved in a family violence incident, resulting in an inability to examine these subgroups. This prevented the results of the present thesis from exploring the characteristics of Aboriginal and Torres Strait Islander youth, and culturally and linguistically diverse young people. It also impeded the ability to validate the VP-SAFvR for young people and prevented the identification of situational factors particularly pertinent to these cohorts.

The fifth limitation relates specifically to the fourth paper. The consistency and quality of information contained within police narratives was dependent on the responding

officer's capacity to interview the victim, young person and any third parties – which could be hindered by willingness to engage with police and level of distress or intoxication (Boxall et al., 2015b) – as well as the amount of time officers were able to dedicate to completing narratives. As a result, the quality of information within narratives was noted to vary considerably, and information recorded in the family violence report which formed part of the quantitative dataset was not always included in the narratives. Similarly, the incident-based nature of police narratives prevents examination of whether such factors are consistently related to a young person's use of child-to-parent abuse. These caveats must be acknowledged in relation to the findings of the fourth paper, however the lack of information regarding the situational characteristics of youth family violence events, and the relative absence of research using police narratives, emphasise the importance of the findings.

9.5. Implications of this Research

The results of this thesis have some implications for theory and practice, particularly in the realms of risk assessment, risk management, and intervention. The need for developmentally sensitive approaches to practice will be discussed, as will the importance of recognising diversity of behaviour (either across different relationships of abuse, or cooccurring family violence and other offending) as an indicator of risk. The need to apply the RNR framework to youth family violence risk assessment, management, and intervention will be highlighted, and the role of situational factors in assessment and intervention will be discussed.

9.5.1. Implications for Theory

The findings have some specific implications for theory development in the field of youth family violence. They suggest that theories need to be developmentally sensitive, acknowledge the potential of youth family violence to be part of a broader pattern of offending behaviour, and examine the role of situational factors in the initiation and

maintenance of abusive behaviour among youth. Theories of youth family violence must acknowledge the presence of youth-specific relational issues (e.g. types of relationships, sources of relationship conflict) and the age-related variation in the prevalence and impact of risk and protective factors on recidivism outcomes (Spruit et al., 2017; van der Put et al., 2011). Typically, youth family violence has been guided by theories of adult family violence (Holt, 2016), with a relative lack of literature outside of youth dating violence (Daff, 2019) attempting to develop theories specific to abusive behaviour by young people (Holt, 2016). Such attempts largely fail to recognise the state of developmental flux experienced by young people (Borum, 2000), the changing nature of family dynamics as children age, and how these factors might affect abusive or violent behaviour.

Youth developmental processes result in the emergence of different risk (e.g. substance use, mental health issues) and relational (e.g. increasing desire for autonomy, increase importance of intimate partnerships) factors, and confer specific challenges that need to be considered in theory development. These include the types of relationships in which young people are most likely to be abusive (e.g. child-to-parent abuse, sibling abuse, intimate partner abuse), the role of parents in mitigating and managing youth family violence, the potential triggers for abusive behaviours (e.g. limit-setting, conflict), and the role of developmental immaturity (e.g. elevated levels of impulsivity, diminished consequential decision-making; Borum, 2016). These issues will be discussed in more depth in the following paragraphs.

The results of this thesis, in addition to those of previous research, highlight the significant role of mental health issues in the use of family violence by young people (Jennings et al., 2017; Peck et al., 2022; Phillips & McGuinness, 2020; Simmons et al., 2018). The high rates of mental health issues across all age groups observed in the first paper, combined with results from Phillips and McGuinness (2020; data drawn from same

jurisdiction as the present thesis) showing mental health issues were significantly higher in adolescent (10-17 years) than adult (18 years and over) family violence-users, suggests mental health issues may be particularly pertinent for young family violence-users. Although additional research examining the causal impact of mental health on use of family violence by young people is required to ascertain its direct relevance to family violence behaviour.

The variations in relationships of abuse as young people age are also important to consider when developing theories of youth family violence. Scholars must explore mechanisms which underlie the apparent increasing prevalence of intimate partner abuse and decreasing prevalence of child-to-parent abuse, with age. Possible explanations for such changes can be found in the literature examining relational development among youth (Collins et al., 2009; Collins & Steinberg, 2006; Giordano, 2003). For example, the increasing desire for autonomy and identity development which occurs throughout adolescence results in the young person reducing their reliance on parental figures and increasing their involvement with peers and intimate partners (Giordano, 2003). This would likely contribute to the higher rates of intimate partner abuse among those in late adolescence and young adulthood, and relative reduction in level of child-to-parent abuse (Snyder & McCurley, 2008). In contrast, the high rates of child-to-parent abuse among those aged 10-14 years is likely to be somewhat reflective of the higher level of parental involvement, and comparatively lower prevalence of intimate partnerships, among this age group.

It is also imperative to acknowledge the results of the first paper showing nearly one in 20 (4.71%) early adolescent family violence-users in the present thesis were found to be abusive toward an intimate partner, while one quarter (25.56%) of those in young adulthood were reported to police for being abusive toward a parent. These findings highlight the need for theories to acknowledge the fact that all relational forms of family violence occur across developmental stages.

Additionally, the high co-occurrence of family violence and other offending behaviour suggests an important area for theory development. While these connections have been explored in relation to adults (Chan et al., 2021; Hamby & Grych, 2013), there is a need for theoretical explanations of youth family violence to address its role as part of a broader pattern of offending behaviour. Within this discussion, diversity of non-family violence offending among young family violence-users was identified in the present thesis as relating to a higher level of risk and need. The exact reasons for this are not known. However, one explanation is that a greater diversity of non-family violence offending is indicative of a higher level of antisociality (Moulds et al., 2019), which is known to be associated with a greater risk for violence (Bonta & Andrews, 2016). Similarly, the results of the third study suggest that those with more diverse patterns of offending behaviour display a greater level of criminogenic need (e.g., substance abuse, school truancy/unemployment), which are known to drive offending behaviour (Bonta & Andrews, 2016). It is also possible that those with more versatile offence histories are more likely to be monitored by police and the broader legal system (e.g., being the subject of a court order), which may increase their risk of being reported to police in future.

Further to this, it is unclear why a dose-response relationship between recidivism risk and diversity of non-family violence offending was observed among those who had engaged in between zero and two offence types, but that this relationship became less substantial once a young person had engaged in three or more offence types. It is possible that the finding is indicative of a 'ceiling effect' in the presence of criminogenic need and antisociality. However, it is also possible, if not likely, that the results are affected by an underlying assumption of the analysis. Examining diversity as a count variable, as was done in the third paper, assumes that all the different types and combinations of offending are equivalent in their impact on recidivism risk, which may not be true. It is likely than some offence types

(e.g. crimes against the person) and reflective of greater family violence recidivism risk than other offence types (e.g. property and deceptions offences). Additional research examining the relationship between diversity of offending, with a focus on different offence types and combinations, would meaningfully contribute to theory development in this area.

Finally, there is a need for theory development to incorporate situational characteristics into their explanation of abusive behaviour. Situational antecedents of violence and abuse are recognised as important components of extant theories on aggression and violence (Anderson & Bushman, 2002; Slotter & Finkel, 2011), yet have been infrequently explored in relation to youth family violence. This represents a significant gap in knowledge which impedes the ability of scholars and clinicians in identifying *when* young people are most likely to engage in abusive behaviour within a familial context. Further identification of such factors would assist in further understanding the impellors, or triggers, of abusive behaviour.

9.5.2. Implications for Practice: Risk Assessment, Risk Management, and Intervention

9.5.2.1. Ensuring Approaches are Developmentally Sensitive and Consider Diversity of Family Violence and Offending Behaviour

This section highlights the importance of risk assessment, risk management, and intervention approaches (1) being developmentally sensitive and cognisant of the role of diversity in family violence and offending behaviour; and (2) exploring the role of situational factors when engaging with young people and families experiencing youth family violence. These areas broadly align with the three overarching aims of this thesis by drawing on the characteristics of young family violence-users (including how they vary with age and prior offending), incorporating knowledge of risk and recidivism, and integrating knowledge of situational factors to support risk management and intervention.

As previously identified, risk assessment tools and risk thresholds need to be validated for use with the age group of the young person being assessed. The results of the present thesis, combined with existing research on the VP-SAFvR (McEwan et al., 2019; Spivak et al., 2021), suggest a single risk tool can be effective for use with young people and adults alike, with only minor adjustments to risk thresholds needed to make the tool developmentally sensitive. This is a positive finding for police and other services, as it suggests it is possible for an appropriately developed and validated tool to effectively predict future family violence across a wide service population.

Clinicians and other professionals risk assessing young people who engage in family violence must also be cognisant of how youth development can impact desistance. Consistent with findings from the broader offending literature (Moffitt, 1993), the peak period of youth family violence occurs in late adolescence and young adulthood, then declines thereafter (Johnson et al., 2015; Simmons et al., 2018; Snyder et al., 2008). Given this, many young people may desist from using family violence on their own and so this must be factored into an appraisal of the young person's risk of future family violence.

Similarly, the age at which a young person first comes to the attention of police for using family violence must be considered when assessing risk and triaging young people for intervention. The general offending literature suggests those with early onset offending are more likely to persist into adulthood (Piquero et al., 2012), indicating a need to prioritise those who come to police attention for using family violence aged 14 years and younger for intervention.

Risk management and intervention approaches employed by police and other services working with young family violence-users could be enhanced through adherence to an evidence-based framework such as the risk-need-responsivity (RNR; Bonta & Andrews, 2016) model. While there is a lack of research examining the utility of the RNR framework

with youth family violence, it has been found useful in guiding risk management and intervention approaches with young people across a variety of settings (Brogan et al., 2015; Nelson & Vincent, 2018). Designing risk management and intervention approaches using the RNR model ensures the level of service is matched to the young person's risk of reoffending (risk principle), is targeted toward relevant criminogenic needs (need principle), and is matched to the characteristics and capacity of the young person (e.g. consider age, presence of any accessibility needs, mental health issues; responsivity principle; Bonta & Andrews, 2016). Recognition of responsivity issues such as the age of the young person also guides the implementation of developmentally sensitive approaches to engagement.

Findings of this thesis suggest generalist youth, and those in late adolescence and young adulthood, may require a different level of service provision than family-only youth and those in early adolescence. Risk management approaches for late adolescent and young adult family violence-users will likely need to target a broad array of criminogenic need (i.e., family/parenting domain, substance abuse, education/employment, antisocial attitudes, and antisocial peers, among others; Spruit et al., 2017; van der Put et al., 2012), while strategies for those in early adolescence may typically be targeted at fewer risk domains (e.g. family/parenting domain; van der Put et al., 2011, 2012). However, it is important to note that when criminogenic needs are present among early adolescent family violence-users these should form a central focus of intervention as they are likely to be particularly pertinent to risk of recidivism (van der Put et al., 2012).

Likewise, risk management and intervention approaches for generalist youth will need to target a broader array of criminogenic need – and be more intensive – than those for family-only youth. The higher level of treatment attrition observed among adult generalists (Petersson & Strand, 2020), coupled with the higher prevalence of restraining order breaches observed in the third study of this thesis, indicate generalist youth (and others with high-

risk/high-need profiles) may benefit from an assertive outreach model of intervention which targets multiple needs simultaneously. The efficacy of assertive community treatment models with "difficult to engage" (Daubney et al., 2021; p. 502) youth has been examined, including those with mental health disturbances (Daubney et al., 2021; Mantzouranis et al., 2019; Vijverberg et al., 2017) and a history of criminal behaviour and/or aggression (Daubney et al., 2021; Schley et al., 2012). Improvement in the level of substance abuse, mental health issues, and education/employment issues experienced by young people have been shown through the use of these programs, in addition to improvements in service engagement (Daubney et al., 2021; Mantzouranis et al., 2019; Schley et al., 2012; Vijverberg et al., 2017). It may be prudent to explore the use of such assertive outreach models with generalist youth and other difficult-to-engage families or young family violence-users.

Among generalist youth, those with a greater diversity of offending (i.e. 3+ offence types) should be prioritised for more rapid intervention. Given that greater diversity of offending (i.e. 3+ offence types) among generalists is associated with more rapid family violence recidivism, and that shorter time to recidivism is associated with more frequent use of family violence (Boxall & Morgan, 2020), there is a need for intervention with this group to be delivered in a timely manner. Unfortunately, there is currently a lack of services available to intervene with young people who engage in family violence, with this being a particularly serious issue in rural and regional areas (Peek-Asa et al., 2011; Reid & Ervin, 2015). Ideally, additional resources would be allocated to address the increasing frequency of police-reported youth family violence incidents (Phillips & McGuinness, 2020). However, in the absence of this, generalists who have been reported to police for three or more different types of non-family violence offences should be prioritised for intervention alongside those family violence-users aged 10-14 years.

Risk management and intervention with family-only youth may need to differ somewhat from that received by generalists. Given nearly one quarter of family-only youth engage in family violence recidivism, yet experience relatively little criminogenic need, it is necessary to consider the role of non-criminogenic needs and family dynamics in the perpetuation of their abusive behaviour over time. It is possible that the drivers of family violence among family-only youth differ to those identified for generalists and those who offend outside the family context, indicating the prospect of these youth representing a group of young people with distinct risk management and intervention needs.

Finally, diversity of family violence - namely abusive behaviour toward two or more different family relationships (i.e., child-to-parent abuse, sibling abuse, intimate partner abuse) - is an important factor to consider when implementing risk management and intervention approaches. The co-occurrence of different relational forms of abuse mean that implementing approaches targeting a single relationship (e.g. a restraining order prohibiting the young person from using violence toward their parent) will likely be insufficient to prevent family violence against other family members. Interventions adopting a whole-offamily approach, such as family systems therapy (Micucci, 1995), may assist to improve family dynamics and assist to mitigate the risk of violence toward other members of the family. The problematic interaction styles observed between multiple family members as part of the situational analysis present in the fourth study, coupled with the high rates of policereported family violence victimisation among young family violence-users further support the need for interventions to adopt a family-oriented approach to intervention. The elevated level of family violence victimisation further indicates a need for risk management and intervention approaches to be trauma-informed, with young peoples' use of violence needing to be conceptualised and addressed with reference to their history of victimisation.

9.5.2.2. Acknowledging the Role of Situational Factors in Youth Family Violence

Three key implications regarding the role of situational factors in assessment, management, and intervention with youth family violence can be gleaned from the present thesis. First, risk assessment of young people who engage in family violence can be enhanced by engaging in functional assessments. Functional assessments assist in identifying the proximal triggers, and risk and protective factors, which may have initiated, maintained, or ended the abusive incident (Otto & Douglas, 2021). Recognition of the key situational antecedents of youth family violence, such as verbal arguments and parental limit-setting, can assist in developing a functional timeline of triggers and interpersonal interactions leading up to the incident, providing a more in-depth understanding of why a young person engages in abusive behaviour and how best to intervene.

Second, short-term risk management approaches may benefit from identifying and incorporating knowledge of situational factors into their approach to risk mitigation. Those who recidivate more quickly after the index incident are more likely to reoffend at a greater frequency over the ensuing six months (Boxall & Morgan, 2020), indicating a need to be able to intervene effectively in the short term. Given situational factors have been identified as important predictors of when violence is most likely to occur (Vagi et al., 2013), and have contributed to the prediction of young people's aggression risk in institutional settings (Daffern & Ogloff, 2009), these may be important factors to consider when attempting to bolster short-term risk management strategies. For example, if a young person is known to come to police attention for using family violence only when intoxicated, police and clinicians may request rapid intervention by a substance abuse counsellor, development of a harm minimisation plan centred on reducing a young person's risk of violence in the context of substance use, and development of a safety plan with victims if the young person presents as substance-affected. Although additional research is needed substantiating the efficacy of

such management approaches with young people who engage in family violence, this represents a starting point for developing tailored risk management approaches.

Third, those interested in risk management of youth family violence risk may benefit from drawing on the inpatient aggression literature, which has a wealth of information about how to effectively de-escalate aggressive behaviour (Maguire et al., 2019; Slaatto et al., 2021). The high prevalence of interpersonal conflict and parental limit-setting preceding incidents of child-to-parent abuse are somewhat analogous to common triggers of inpatient aggression, including sensitivity to perceived provocation, the denial of patient requests by staff, and an unwillingness of patients to follow staff directions (Daffern & Ogloff, 2009; Ogloff & Daffern, 2006; Woods & Almvik, 2002). Identification of these common triggers have been used to develop risk assessment and management plans (Maguire et al., 2019), including among adolescent inpatients (Slaatto et al., 2021). Further exploration of these common situational characteristics and triggers of youth family violence may even be applicable to managing and intervening with other forms of abusive behaviour, including violence in the out-of-home care system.

Finally, understanding common situational antecedents of youth family violence can help clinicians with scenario planning, which is a key component of many modern risk assessments and for which there is currently little guidance (DeMatteo et al., 2010). Identification of such factors assists in tailoring risk management strategies to the situational triggers of a young person's behaviour. This may enhance the likelihood interventions will be implemented (Rizvi & Sayers, 2020) and improve intervention outcomes.

9.5.2.3. Additional Implications for Risk Assessment, Risk Management, and Intervention

Two additional implications of the findings of the present thesis include the importance of acknowledging rurality of residence and neurodevelopmental disorders as two

significant responsivity issues which are often overlooked in the field of youth family violence. These were somewhat unexpected findings and so are being discussed separately here. Although neither of these factors formed the central focus of the present thesis or the individual papers, rurality was briefly examined in the first and third paper, while the prevalence of neurodevelopmental issues was an important finding of the fourth paper. These represented two somewhat unexpected findings, however, are important responsivity issues which are discussed briefly here.

9.5.2.3.1. Rurality

Rurality of residence is a responsivity factor rarely considered in relation to risk assessment, risk management, and intervention. The first empirical study, consistent with the findings of Phillips and McGuiness (2020), identified youth family violence to occur at twice the rate in rural and regional (and remote) locations as metropolitan areas which, when coupled with the limited number of services available in these locations (Reid & Ervin, 2015), suggests risk management and intervention with rurally located youth is likely to be logistically complex. These findings are consistent with the adult intimate partner violence literature, which shows family violence in rural and remote areas to be more serious and risk management of these cases to be hampered by limited access to support for both victims and family violence-users (Edwards, 2015; Peek-Asa et al., 2011; Strand & Storey, 2019). There is a need for greater allocation of family violence-specific resources by police and other services to rural and regional locations, as well as the need for greater allocation of government funding to boost service provision specific to criminogenic need (e.g. alcohol and other drug services, employment programs and support) for these areas.

The elevated prevalence of risk factors observed among family violence-users in rural and regional communities (Strand & Storey, 2019), including higher levels of mental health issues and substance use (Phillips & McGuinness, 2020), higher levels of socioeconomic

disadvantage (Phillips & McGuinness, 2020), and elevated prevalence of associated criminal offences (Phillips & McGuinness, 2020) highlights the compounding risk and disadvantage in these communities. Additionally, those in rural and regional areas receive services at a significantly slower rate than their metropolitan counterparts (Strand & Storey, 2019), are less likely to be referred to support services by police (Phillips & McGuinness, 2020), and affects how police apply risk ratings when assessing future family violence (Strand & Storey, 2019). Those engaged in the assessment of risk and provision of recommendations for risk management and intervention must therefore be cognisant of these significant responsivity issues and barriers to support experienced by family violence-users in rural and regional locations.

9.5.2.3.2. Neurodevelopmental disorders

The fourth study identified neurodevelopmental disorders as a key responsivity issue among young family violence-users, given the presence of additional needs (e.g. issues with understanding, communication, and impulsivity) which may impact their capacity to effectively engage in risk management and intervention. Results from the fourth study suggest neurodevelopmental disorders are likely to be significantly more prevalent among young people who engage in family violence (13%) than the general Australian population, with population estimates ranging from 1% (autism spectrum disorder and intellectual disability; American Psychiatric Association, 2013) to 5% (ADHD; American Psychiatric Association, 2013). Similarly, those with neurodevelopmental disorders and other disabilities are over-represented as respondents on restraining orders (Campbell et al., 2020), yet this approach to risk management is unlikely to be effective given issues with understanding, impulse control, and consequential decision-making, among others (Campbell et al., 2020). Risk management with young people identified as having neurodevelopmental disorders who engage in youth family violence is a key area of research need.

9.6. Directions for Future Research

Six areas for future research are highlighted here. First, there is a need for more research validating existing family violence and/or youth-oriented risk assessment instruments. While it may be worthwhile for scholars to attempt to build new risk instruments, validation of existing risk tools would be a less resource- and time-intensive means of providing clinicians and other service providers with the means to employ evidence-based risk assessment practices. Second, the role of different risk factors for generalist and family-only youth, including how they influence recidivism, represents an important area for future research. The family domain is likely to be relevant for both generalist and family-only youth, however, may be particularly pertinent to recidivism risk among the latter group due to their relative lack of criminogenic need.

Third, research examining youth family violence in the context of risk management is sorely lacking, with current management approaches often mirroring those utilised with adults (e.g. the use of restraining orders and eviction from the home; Campbell et al., 2020). Although it is expected that these are used less frequently than with adults, there is insufficient research to substantiate this hypothesis, and the literature has largely failed to validate the use of such approaches with young family violence-users. This indicates a lack of evidence-based and developmentally-informed strategies for managing youth family violence. Fourth, the high prevalence of neurodevelopmental disorders among young family violence-users indicates additional research is needed exploring effective risk assessment, management, and intervention strategies for this cohort.

Fifth, examination of the situational antecedents of youth family violence events provides an important avenue for future research, including whether they represent effective targets for risk of family violence recidivism. Sixth, there is a need for research examining youth family violence among Indigenous communities and culturally and linguistically

diverse (CALD) communities. There is a need for careful examination of race in future family violence risk assessment research, including exploration of how to prevent racial bias from influencing decision-making. Additionally, research regarding culturally-specific indicators of family violence – including knowledge of the cultural group's family structures, social hierarchies, and community expectations (Shepherd & Masuka, 2021) – may be important in differentiating non-abusive and culturally normative family conflict from family violence, and assist in developing culturally responsive interventions.

9.7. Conclusions

The findings of this thesis have advanced current knowledge of the characteristics of police-reported youth family violence, improved understanding of family violence recidivism risk and risk assessment for this cohort, and increased knowledge of the situational factors relevant to youth family violence. Although there were age-related differences in the characteristics of young family violence-users, the VP-SAFvR (McEwan et al., 2019) was found to display both discriminative and predictive validity across three distinct developmental periods (i.e., early adolescence (10-14 years), late adolescence (15-19 years), and young adulthood (20-24 years)). Similarly, generalist youth (i.e., those who engaged in both family violence and other offending behaviour) were found to display a higher level of risk and need than family-only youth (i.e., only came to police attention for using family violence), with those who engaged in three or more types of non-family violence offending found to be at the highest risk of family violence recidivism within six months. Finally, situational characteristics of child-to-parent abuse incidents were identified and could be used to inform risk management and intervention approaches, as well as support the use of functional assessments with this cohort.

These findings have the potential to inform risk assessment, risk management, and intervention approaches among police and other service providers. The results highlight the

need for developmentally informed approaches. Police and other service providers should be cognisant of the interconnectedness of the different relational forms of family violence, and of the high rate of co-occurrence of family violence and other offending behaviour among young people. In addition, risk management and intervention should be targeted to the young person's level of risk and need.

The characteristics of young people who use family violence identified in the present thesis, their likelihood of engaging in family violence recidivism, and the validation of an existing risk assessment instrument, all contributed to advancing understanding of the characteristics associated with youth family violence and improved understanding of family violence recidivism and risk assessment for police-reported youth family violence.

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APPENDICES APPENDIX I: Authorship Indication Forms



Swinburne Research

Authorship Indication Form

For HDR students

NOTE

This Authorship Indication form is a statement detailing the percentage of the contribution of each author in each submitted/published 'paper'. This form must be signed by each co-author and the Principal Supervisor. This form must be added to the publication of your final thesis as an appendix. Please fill out a separate form for each published paper to be included in your thesis.

DECLARATION

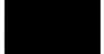
We hereby declare our contribution to the publication of the 'paper' entitled: Characteristics of young people who use family violence in adolescence and young adulthood: an age-based analysis

First	Author	

Name: Abigail Sheed

Percentage of contribution: 80%





Date: 20/ 06/ 2022

Brief description of contribution to the 'paper' and your central responsibilities/role on project:

Paper planning and design Data collection, analysis, and interpretation Manuscript preparation and editing

Second Author

Name: Associate Professor Troy McEwan

Signature:

Signature:

Percentage of contribution: 5%



Brief description of your contribution to the 'paper':

Assistance in paper planning and design Assistance in data analysis and interpretation Manuscript editing and interpretation

Third Author

Name: Dr Melanie Simmons

Percentage of contribution: 5%

Brief description of your contribution to the 'paper':

Date: 20 / 06 / 2022

Name:Dr Benjamin Spivak Signature: Percentage of contribution: 5% Date: 20 / 06 / 2022 Brief description of your contribution to the 'paper': Date: 20 / 06 / 2022 Data Cleaning Assistance in data analysis and interpretation Signature: V V Percentage of contribution: 5% Date: 20 / 06 / 2022 Brief description of your contribution to the 'paper': V Percentage of contribution: 5% Date: 20 / 06 / 2022 Brief description of your contribution to the 'paper': V Assistance in paper planning and design Assistance in data analysis and interpretation V Assistance in data analysis and interpretation V

Principal Supervisor:

Name: Associate Professor Troy McEwan

Date: 20 / 06 /2022

In the case of more than four authors please attach another sheet with the names, signatures and contribution of the authors.

Authorship Indication Form



Signature:

Fourth Author



Swinburne Research

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DECLARATION

We hereby declare our contribution to the publication of the 'paper' entitled: Assessing Risk of Family Violence by Young People: Identifying Recidivism Base Rates and the Validity of the VP-SAFvR for Youth

First Author

Name: Abigail Sheed

Percentage of contribution: 80%

Brief description of contribution to the 'paper' and your central responsibilities/role on project:

Paper planning and design Data collection, analysis, and interpretation Manuscript preparation and editing

Second Author

Name: Associate Professor Troy McEwan

Percentage of contribution: 5%

Brief description of your contribution to the 'paper':

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Third Author

Name: Dr Nina Papalia

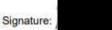
Percentage of contribution: 5%

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Date: 20 / 06 / 2022



Date: 20 / 06 / 2022



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Name:Dr Benjamin Spivak

Percentage of contribution: 5%

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Principal Supervisor:

Name:Associate Professor Troy McEwan

Date: 20 / 06 /2022

In the case of more than four authors please attach another sheet with the names, signatures and contribution of the authors.

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Authorship Indication Form

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Date: 20 / 06 / 2022

Signature:

Date: 20 / 06 / 2022



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DECLARATION

We hereby declare our contribution to the publication of the 'paper' entitled: The relevance of prior offending to risk and need in youth family violence: a population cohort study

First Author

Name: Abigail Sheed

Percentage of contribution: 80%

Brief description of contribution to the 'paper' and your central responsibilities/role on project:

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Percentage of contribution: 5%

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Date: 20 / 06 / 2022

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Percentage of contribution: 5%

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Date: 20 / 06 / 2022

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Signature

Date: 20 / 06 / 2022

Name: Associate Professor Troy McEwan

Percentage of contribution: 5% Brief description of your contribution to the 'paper': Assistance in paper planning and design Assistance in data analysis and interpretation Manuscript editing and interpretation

Principal Supervisor:

Signature:

Name:Associate Professor Troy McEwan

Date: 20 / 06 /2022

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DECLARATION

We hereby declare our contribution to the publication of the 'paper' entitled: The role of situational factors in child-to-parent abuse: Implications for risk assessment, management, and intervention

First Author

Name: Abigail Sheed

Percentage of contribution: 80%

Brief description of contribution to the 'paper' and your central responsibilities/role on project:

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Second Author

Name:Dr Natasha Maharaj

Percentage of contribution: 5%

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Manuscript editing and interpretation

Third Author

Name: Dr Melanie Simmons

Percentage of contribution: 5%

Brief description of your contribution to the 'paper': Assistance in paper planning and design Assistance in data analysis and interpretation Manuscript editing and interpretation Date: 20/ 06/ 2022

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Signature: Date: 20 / 06 / 2022

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Date: 20 / 06 / 2022

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Fifth Author

Name: Dr Nina Papalia

Percentage of contribution: 5%

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Date: 20 / 06 / 2022

Brief description of your contribution to the 'paper': Assistance in paper planning and design Assistance in data analysis and interpretation Manuscript editing and interpretation:



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Assistance in data analysis and interpretation

Manuscript editing and interpretation

Principal Supervisor:

Signature:

Name:Associate Professor Troy McEwan

Date: 20 / 06 /2022

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Authorship Indication Form

Appendix II: Ethics Approval Notices and Associated Documents

I, Abigail Sheed, confirm that all conditions pertaining to the ethical clearance provided by the Swinburne University Human Research Ethics Committee (SUHREC) have been properly met, and that final reports have been submitted.

Swinburne University of Technology Human Research Ethics Committee

Approval certificate



30/11/2020

The ethics application for your project Understanding family violence use by young people: an examination of risk and the impact of situational factors has been approved.

Chief Investigator: Troy McEwan

Ref: 20204231-5617

Approved Duration: 30/11/2020 to 30/11/2022

I refer to the ethical review of the above project protocol by Swinburne's Human Research Ethics Committee (SUHREC) or its sub-committees.

I am pleased to advise that, as submitted to date, the project may proceed in line with standard on-going ethics clearance conditions outlined below.

- The approved duration is as shown above unless an extension request is subsequently approved.
- All human research activity undertaken under Swinburne auspices must conform to Swinburne and external regulatory standards, including the National Statement on Ethical Conduct in Human Research (2018) and with respect to secure data use, retention and disposal.
- The named Swinburne Chief Investigator/Supervisor remains responsible for any personnel appointed to or associated with the project being made aware of ethics clearance conditions, including research and consent procedures or instruments approved. Any change in Chief Investigator/Supervisor, and addition or removal of other personnel/students from the project, requires timely notification and SUHREC endorsement.
- The above project has been approved as submitted for ethical review by or on behalf of SUHREC. Amendments to approved procedures or instruments ordinarily require
 prior ethical appraisal/clearance from SUHREC for approval. SUHREC must be notified immediately or as soon as possible thereafter of (a) any serious or unexpected
 adverse effects on participants and any redress measures; (b) proposed changes in protocols; and (c) unforeseen events which might affect continued ethical
 acceptability of the project.
- At a minimum, an annual report on the progress of the project is required as well as at the conclusion (or abandonment) of the project.
- A duly authorised external or internal audit of the project may be undertaken at any time.
- Please forward this approval certificate to relevant members of the project team.

This research project was approved during COVID-19 restrictions. The conduct of the research during this period should reflect any changes in relation to university and government COVID-19 mandates in the relevant jurisdictions. To ensure you have accommodated these mandates please refer to the Swinburne Ethics COVID-19 website <u>here</u>.

The following investigators have been approved to work on the project:

Chief Investigator

Troy McEwan

Associate Investigators

Nina Papalia, Melanie Simmons

Student Investigators

Abigail Sheed

Please contact the Swinburne Research Ethics Office If you have any queries.

Regards,

Dr Astrid Nordmann

on behalf of

Research Ethics Office

Swinburne University of Technology

P: +61 3 9214 3845 | E: resethics@swin.edu.au

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VICTORIA POLICE

Policing Research Unit Capability Department

Victoria Police Centre Level 35, 311 Spencer Street Docklands, VIC, 3008 DX 210096 Telephone 8335 6222, 8335 6226 Email research.committee@police.vic.gov.au https://www.police.vic.gov.au/research

18 November 2020

Associate Professor Troy McEwan Centre for Forensic Behavioural Science Swinburne University of Technology 1/582 Heidelberg Road Alphington Vic 3078

Dear Troy,

Re: Application to the Research Coordinating Committee for RCC – 968 Understanding family violence use by young people: an examination of risk and the impact of situational factors.

I write to advise you that the Victoria Police Research Coordinating Committee (RCC) has approved your request to undertake the above research involving Victoria Police.

This approval is conditional on:

- Evidence of approval from an external HREC;
- The Research Organisation signing a Research Agreement outlining the conditions governing the conduct of research involving Victoria Police.

You will need to ensure the completion of the Research Agreement and return it to Victoria Police before the research can commence. The Research Agreement will be forwarded to you electronically in due course.

If you have any queries or require further clarification, please contact the RCC Secretariat on the contact details above.

Yours sincerely,



Dr David Ballek Secretariat, Research Coordinating Committee

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Appendix II: Supplementary Materials

Supplemental material is provided for Empirical Paper Two (Chapter Six). Table S1 provides the results of VP-SAFvR scores at each threshold of the tool and outlines the prevalence of family violence incidents and recidivism according to each threshold score of the VP-SAFvR. Similarly, Table S2 provides classification statistics for any-dyad recidivism among young people aged 10-24 years who use family violence.

Performance of the VP-SAFvR for family violence recidivism within any dyad

There was a strong positive correlation (tau-b = .85, p < .001) between VP-SAFvR score categories and rates of any-dyad FV recidivism within each category. Table S3 provides classification accuracy statistics of the VP-SAFvR according to the age of young family violence-users when a threshold score of three or four are used for examining anydyad recidivism. The discriminative validity of the VP-SAFvR for young people aged 10-24 years for any-dyad recidivism displayed moderate discriminative capacity. High sensitivity (.74) and moderate specificity was reached at a threshold score of four. Discriminative validity did not vary greatly according to age. High sensitivity and moderate specificity were demonstrated at a threshold score of four for those aged 15-19 years and 20-24 years, while a threshold score of three appeared more appropriate for those aged 10-14 years.

Table S4 provides classification accuracy statistics of the VP-SAFvR according to the gender of young family violence-users and the relational dyad in which abuse is used. The VP-SAFvR displayed moderate discriminative validity for both males and females. A threshold score of four provided high sensitivity and moderate specificity for both males and females. Moderate discriminative validity was observed for child-to-parent abuse and intimate partner abuse, while a high level of discriminative validity was observed for sibling abuse.

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Score	Category	Number of family violence incidents	Family violence recidivism in	Cumulative family violence		
		n (%)	category, $N(\%)$	recidivism (%)		
0	0	284 (5.66)	30 (1.70)	1.70		
1	1	535 (10.67)	102 (5.77)	7.48		
2	2	586 (11.69)	141 (7.99)	15.47		
3	3	613 (12.23)	185 (10.48)	25.95		
4	4	647 (12.90)	239 (13.54)	39.49		
5	5	598 (11.93)	222 (12.58)	52.07		
6	6	544 (10.85)	232 (13.14)	65.21		
7	7	417 (8.32)	202 (11.44)	76.66		
8	8	294 (5.86)	148 (8.39)	85.04		
9	9	240 (4.79)	132 (7.48)	92.52		
10-16 ^a	10	241 (4.82)	133 (7.54)	100.00		

VP-SAFvR score and family violence recidivism for any-dyad recidivism by threshold score

^aScores of 10 and above were grouped due to low prevalence and comprised 4.8% of the total sample

Score	Sensitivity	Specificity	PPV	NPV	Relative Risk
	[95% CI]				
1+	.98 [.9899]	.08 [.0709]	.37 [.3538]	.89 [.8593]	3.48 [2.48-4.90]
2+	.93 [.9194]	.21 [.2023]	.39 [.3841]	.84 [.8186]	2.42 [2.06-2.85]
3+	.85 [.8386]	.35 [.3337]	.42 [.4043]	.81 [.7883]	2.14 [1.91-2.39]
4+	.74 [.7276]	.49 [.4750]	.44 [.4246]	.77 [.7579]	1.93 [1.77-2.11]
5+	.61 [.5863]	.61 [.5963]	.49 [.4448]	.74 [.7276]	1.75 [1.62-1.90]
6+	.48 [.4650]	.73 [.7174]	.49 [.4651]	.72 [.7073]	1.73 [1.61-1.87]
7+	.35 [.3337]	.82 [.8183]	.52 [.4954]	.70 [.6871]	1.71 [1.59-1.84]
8+	.23 [.2125]	.89 [.8890]	.53 [.5057]	.68 [.6769]	1.66 [1.54-1.80]
9+	.15 [.1317]	.93 [.9394]	.55 [.5160]	.67 [.6568]	1.66 [1.52-1.82]
10+	.08 [.0609]	.97 [.9697]	.55 [.4962]	.66 [.6467]	1.61 [1.43-1.81]

Classification accuracy of the VP-SAFvR for 10-24 years for any-dyad recidivism

Classification accuracy of	f the VP-SAFvR at a threshold scor	re of 3 and 4 for any-dyad recidivism

	Ν	AUC ^a	Score	Sensitivity	Specificity	PPV	NPV	Relative Risk ^a
	(% Recidivism)	[95% CI]						[95% CI]
10-24 years	1765 (35.31)	.65 [.6467]	3	.85 [.8386]	.35 [.3337]	.42 [.4043]	.81 [.7883]	2.14 [1.91-2.39]
			4	.74 [.7276]	.49 [.4750]	.44 [.4246]	.77 [.7579]	1.93 [1.77-2.11]
Under 18s (10-17yrs)	578 (36.28)	.66 [.6369]	3	.79 [.7582]	.45 [.4248]	.45 [.4248]	.79 [.7682]	2.16 [1.82-2.57]
			4	.65 [.6169]	.59 [.5662]	.48 [.4451]	.75 [.7278]	1.88 [1.64-2.16]
10-14 years	203 (34.23)	.67 [.6372]	3	.74 [.6780]	.53 [.4858]	.45 [.4051]	.80 [.7484]	2.22 [1.70-2.90]
			4	.58 [.5164]	.70 [.6574]	.50 [.4356]	.76 [.7180]	2.06 [1.65-2.58]
15-19 years	697 (37.17)	.67 [.6570]	3	.84 [.8187]	.38 [.3541]	.45 [.4247]	.80 [.7783]	2.25 [1.89-2.69]
			4	.73 [.6976]	.52 [.4955]	.47 [.4450]	.76 [.7379]	1.98 [1.73-2.28]
20-24 years	865 (34.18)	.65 [.6367]	3	.87 [.8589]	.28 [.2631]	.39 [.3741]	.81 [.7884]	2.07 [1.73-2.47]
			4	.79 [.7682]	.41 [.3843]	.41 [.3843]	.79 [.7682]	1.92 [1.67-2.22]

 $\overline{Note. All AUC}$ values are significant at the p < .001 level.

^aRelative risk refers to the risk of same-dyad recidivism if an individual scores at or above the given threshold relative to those who score below the threshold

Classification accuracy	v of the VP-SAFvR	according to gender	and relationship (any dyad)
-------------------------	-------------------	---------------------	-----------------------------

	N (%)	AUC [95% CI]	Score	Sensitivity	Specificity	PPV	NPV	Relative Risk ^a
								[95% CI]
Male	3519 (70.4)	.66 [.6468]	3	.85 [.8387]	.36 [.3438]	.43 [.4145]	.81 [.7883]	2.28 [1.99-2.61]
			4	.75 [.7378]	.49 [.4751]	.46 [.4348]	.78 [.7580]	2.03 [1.82-2.26]
Female	1478 (29.6)	.63 [.6066]	3	.83 [.7986]	.32 [.3035]	.38 [.3541]	.79 [.7583]	1.81 [1.47-2.22]
			4	.71 [.6775]	.47 [.4450]	.40 [.3643]	.77 [.7380]	1.68 [1.43-1.99]
Child-to-parent	2026 (40.5)	.63 [.6065]	3	.82 [.7985]	.34 [.3137]	.43 [.4146]	.76 [.7279]	1.76 [1.51-2.06]
abuse			4	.71 [.6874]	.47 [.44-50]	.45 [.4248]	.73 [.6976]	1.64 [1.45-1.87]
Intimate partner	1907 (38.1)	.65 [.62.67]	3	.89 [.8691]	.28 [.2631]	.40 [.3742]	.82 [.7886]	2.27 [1.83-2.81]
abuse			4	.79 [.7682]	.41 [.3844]	.42 [.3944]	.79 [.7582]	1.94 [1.65-2.28]
Sibling abuse	580 (11.6)	.73 [.6877]	3	.84 [.7789]	.46 [.4151]	.38 [.3343]	.88 [.8291]	3.03 [2.07-4.40]
			4	.74 [.6781]	.63 [.5867]	.44 [.3850]	.86 [.8290]	3.13 [2.30-4.27]

Note. All AUC values are significant at the *p*<.001 level

^aRelative risk refers to the risk of same-dyad recidivism if an individual scores at or above the given threshold relative to those who score below the threshold