Situational Action Theory and Intimate Partner Violence:

An Exploration of Morality as the Underlying Mechanism in the Explanation of Violent Crime

Jennifer Louise Barton-Crosby
Darwin College

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Institute of Criminology
University of Cambridge

Supervised by Professor Per-Olof Wikström

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Research Summary

Despite the criminal nature of intimate partner violence, scholars infrequently apply general theories of crime to understanding its causes (Dixon, Archer, & Graham-Kevan, 2012). Indeed, some scholars reject the notion that the causes of intimate partner violence align with the causes of general crime and violence (Dobash, Dobash, Wilson, & Daly, 1992). A second area of contention is whether male and female violence can be explained within the same theoretical framework (Dutton & Nicholls, 2005). In this thesis I argue that as a type of criminal behaviour, understanding the causes of intimate partner violence from a criminological perspective is a valid and necessary research endeavour. Further, guided by the principles of the theoretical framework of this thesis, I submit that both male and female intimate partner violence can be explained within the same general theory of crime.

This thesis applies situational action theory, a general theory of crime that places morality at the centre of its explanatory framework, to the understanding and explanation of intimate partner violence. This thesis concentrates on the roles of personal morality and provocation in intimate partner violence perpetration. Partner conflict is defined as the *experience* of provocation, while friction sensitivity and low partner cohesion are included as key factors leading to partner conflict. Specifically, this thesis examines whether the strength of personal morality influences whether individuals respond to provocation with violence against a partner.

To address the aims of the research, this thesis uses data from the Peterborough Adolescent and Young Adult Development Study, a study designed to test situational action theory. Participants are a representative sample of males and females between 24 and 25 years of age. Path analyses using a multiple-group method revealed that high friction sensitivity and low partner cohesion contributed to increased partner violence perpetration by influencing the level of partner conflict. Morality had a significant moderating effect on the path between partner conflict and partner violence perpetration. Namely, individuals with weak morality, and who frequently engaged in partner conflict, were significantly more likely to perpetrate acts of partner violence than individuals with strong morality who engaged in frequent conflict with a partner. These findings were replicated across males and females. The findings of this research illustrate the importance of morality in the explanation of partner violence, and provide evidence that both male and female partner violence can be explained within the framework of situational action theory.

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For my grandparents, Lilian Grace Court and Walter Edward Court

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Introduction and Thesis Overview

> One of the greatest contradictions of human nature is that some of the most personally injurious behaviors occur among loved ones
>
> (Arriaga & Oskamp, 1999, p. 3)

Traditionally, violence between partners, and family members more generally, was considered a private, family matter (Pleck, 1989; Pollitz Worden, 2000). Indeed, it was often thought to be inappropriate for the criminal law to interfere in all but the most serious of family matters (Buzawa & Buzawa, 2003; Dobash & Dobash, 1992; Pollitz Worden, 2000). However, over the course of the last 40 years or so, it has become increasingly acknowledged that violence between intimate partners should not remain hidden behind closed doors and ignored by the criminal justice system (e.g. Starmer, 2011).

Recognition of intimate partner violence (IPV) as a serious criminal justice issue has been reflected in the strengthening of policing and criminal prosecution policies regarding IPV, particularly in the USA and UK (Buzawa & Buzawa, 1979, 2003; Dasgupta, 2002; Ferraro, 1989; Harwin, 2006; Pleck, 1989; Pollitz Worden, 2000). Accordingly, the research focus of academic criminology has been on the policing and deterrence of IPV (e.g. Berk, Campbell, Klap, & Western, 1992; Maxwell, Garner, & Fagan, 2002; Rosemary & Garner, 2001; Schmidt & Sherman, 1993; Sechrist & Weil, 2017; Sherman & Berk, 1984; Tolman & Weisz, 1995). However, the *causes* of IPV have, generally, not been studied through the lens of criminological theory. More specifically, IPV scholars have tended to eschew general theories of crime and theories of criminal violence as suitable frameworks within which to explain the causes of IPV (e.g. Dobash & Dobash, 1979). Rather, it has been noted that IPV (particularly male-to-female perpetrated IPV) is often considered a “special” type of violence, the causes of which are thought to be different to general criminal behaviour and criminal violence (Dixon, Archer, & Graham-Kevan, 2012, p. 198). Yet, as a behaviour that breaks the criminal law, in this thesis I contend that it is appropriate, even necessary, to understand the causes of IPV from a criminological perspective.

It follows that a principal aim of this thesis is to apply a criminological theory of the causes of crime to IPV. The theoretical framework of this thesis is situational action theory (SAT), a general theory of crime developed by Per Olof Wikström, which positions morality at the centre of its explanatory framework (Wikström, 2004, 2010a, 2014). Wikström submits that all acts of crime are acts of moral rule-breaking, and all moral rule-breaking actions can be explained within its framework (e.g. Wikström, 2006, 2010). Wikström further contends that in order to understand how and why people break moral rules, a theory of crime must not only specify causally relevant variables, but must also posit the mechanisms by which these variables exert their influence (e.g. Wikström, 2004; Wikström & Treiber, 2013). Therefore, my aim, and a key contribution of this thesis, is to illustrate how IPV can be subsumed within the definition of crime as moral rule-breaking and thus explained within SAT's general framework of moral rule-breaking action. In doing so, this thesis also provides a test of SAT's reach as a general theory of crime.

The women's movement of the 1970s is often credited with instigating the political and legal reform that resulted in the strengthened criminal justice response to IPV, particularly violence against women (Buzawa & Buzawa, 2003; Coker, 2001; Dasgupta, 2002; Dutton & Corvo, 2006; Pleck, 1989; Pollitz Worden, 2000; Straus, 2009). However, while the women's movement shone a spotlight on the problem of violence against women, a wealth of subsequent research has consistently shown that approximately equal rates of men and women perpetrate IPV (e.g. Archer, 2000, 2002; Straus, 1999, 2004, 2008; Straus, Gelles, & Steinmetz, 2006 [1980]). The finding of 'gender symmetry'[1] in IPV perpetration has led to a highly contentious debate[2] within the IPV literature (for an overview of the 'gender debate' see e.g. Straus, 1999). Indeed, many IPV scholars fervently maintain that IPV is predominantly perpetrated by males against females, and are highly critical of those who argue that IPV perpetration is gender symmetrical (DeKeseredy, 1999;

[1] Note that I acknowledge the distinction between biological sex and what is often referred to as the social construction of gender (Cannon, Lauve-Moon, & Buttell, 2015; Diamond, 2002; Kruttschnitt, 1994). I also acknowledge that biological sex and gender (as well as sexual identity and sexual orientation) are not binary. However, sex and gender are often used interchangeably, particularly within the IPV literature (Dragiewicz, 2008). I too use both sex and gender to refer to differences and similarities between males and females in the perpetration of IPV in alignment with the terminology of the literature, for example the 'gender debate' and 'gender-specific' theories. However, where I do refer to the distinction between gender as a social construct and biological sex, I make clear the distinction being made. This should not be mistaken as a disregard or insensitivity to the distinctions between the terms.

[2] For example, proponents of the gender asymmetry position (i.e. that IPV is predominantly male-perpetrated) have called those who submit that IPV is perpetrated at similar rates by males and females (i.e. it is gender symmetrical) "anti-feminist" (DeKeseredy, 2004, p. 621; M. P. Johnson, 2011, p. 285). While those who contend that IPV perpetration is gender symmetrical suggest that the gender asymmetry position is driven by "an ideological commitment" (Straus, 2011, p. 1087), "groupthink" and "belief perseverance" (Dutton & Corvo, 2006, p. 465; Dutton & Nicholls, 2005, p. 682).

DeKeseredy & Dragiewicz, 2007; Dobash et al., 1992; Harwin, 2006). Further, it is observed that much theorising on the causes of IPV has concentrated on explaining male-to-female IPV, rather than understanding "causes common to both genders" (Dutton & Nicholls, 2005, p. 685).

This thesis collects data on both male and female IPV perpetration, but does not begin with a preconception about the gender symmetry or asymmetry of IPV perpetration. Rather, in line with SAT, the assumption of this thesis is that for those males and females who do perpetrate IPV, the explanatory process will be the same. SAT was developed to explain the causes of crime (moral rule-breaking), irrespective of the biological sex of the perpetrator (Wikström, 2011). It follows that proponents of SAT contend that the explanatory framework of SAT should be equally applicable to male and female moral rule-breaking behaviour, regardless of whether there are sex differences in the rate of moral rule-breaking behaviour (Hirtenlehner & Treiber, 2017). Thus, a second key aim and contribution of this thesis is to test the generalisability of SAT to explain both male and female perpetrated IPV.

To address the key aims of the research, this thesis is divided into five Parts. Part 1 (Chapter 1) provides the context of the research. Chapter 1 begins by providing the definition of IPV that is adopted within this thesis, focusing on the contemporary and gender-neutral nature of the term. In defining IPV I acknowledge that IPV can refer to a broad spectrum of abusive behaviour, but restrict the focus of this thesis to physical (non-sexual) violence against a partner. Chapter 1 goes on to chronicle the emergence of IPV as a serious criminal issue, and provides the rationale for studying the causes of IPV from a criminological perspective. Despite IPV being recognised as criminal violence, IPV has traditionally been considered by some prominent IPV scholars (e.g. Dobash & Dobash, 1979) to have aetiological roots distinct from criminal violence. Accordingly, I introduce these objections and thus the reason why IPV scholars have tended to reject attempts to explain the causes of IPV within general theories of crime and violence. I conclude by contending that as a behaviour that clearly violates the criminal law, it is appropriate to understand and explain the causes of IPV within the framework of a general theory of crime, specifically, SAT (e.g. Wikström, 2004). In doing so, I highlight the novel contribution that this thesis makes to both the IPV and SAT theoretical and empirical literatures.

Part 2 (Chapters 2-4) delineates the theoretical framework of this thesis and reviews pertinent IPV literature. The aim of Chapter 2 is to define the nature and role of morality in SAT, and to illustrate how IPV can be defined and thus explained as moral rule-breaking behaviour. Morality is

positioned at the centre of the explanatory framework of SAT: acts of crime are defined as acts of moral rule-breaking, and personal morality is posited to be key to understanding why people break moral rules (e.g. Wikström, 2010). However, what constitutes morality, and thus what constitutes moral action, is hard to pin down to an agreed upon definition (Hitlin & Vaisey, 2010). Therefore, Chapter 2 begins with a brief introduction to some conflicting philosophical views of morality and moral behaviour, and the importance that has been placed on the relationship between morality and social order in human society. The role of morality in theories of crime is then reviewed, highlighting that while brief references are often made to the immorality of criminal behaviour, morality is typically neglected as the central explanatory variable in theories of the causes of crime (Tittle, 2007; Wikström, 2010a).

The rest of Chapter 2 is devoted to defining and further developing existing suppositions concerning the nature and role of moral rules and personal morality in SAT. With regard to moral rules, Chapter 2 distinguishes SAT's characterisation of the law as a system of moral rules from moralistic notions of the law. Namely, it is made clear that SAT is concerned with explaining why people break rules of conduct (moral rules), but does not make a judgement on the moral value of these rules (Wikström, 2004, 2010a). In further defining and developing the nature of moral rules in the SAT framework, Chapter 2 provides a unique contribution to the existing SAT literature.

With regard to personal morality, Chapter 2 defines SAT's construct of personal morality, and addresses the important role of personal morality in SAT. Personal morality is a composite of personal moral rules about what is right and wrong, and moral emotions, which serve to influence how much a person cares about following moral rules (Wikström, Oberwittler, Treiber, & Hardie, 2012). More specifically, morality is posited to be important to understanding why some people perceive moral rule-breaking as a viable behavioural option and others do not (Wikström, 2006). Thus, personal morality is arguably the most important individual-level variable in SAT (Wikström & Treiber, 2007). Accordingly, the role of personal morality in explaining IPV perpetration is a central focus of this thesis.

Next, Chapter 3 gives a detailed description of the analytical framework of SAT, namely how SAT submits acts of moral rule-breaking should be explained. SAT was developed by Wikström in response to the theoretical and empirical fragmentation that plagues criminology, and the hindrance that such fragmentation has had on progress towards an adequate understanding of the causes of crime (Wikström, 2004). Wikström (e.g. 2004, 2010, 2011) submits that one of the primary sources

of the fragmentation is the accumulation of variables that are correlated with crime, but the absence of theories that posit causal mechanisms to explain how and why such variables cause a person to commit an act of crime. Similarly, in Chapter 3, I observe that many of the deficiencies of criminological theory identified by Wikström, particularly the neglect of causal mechanisms, are present in the IPV literature. Thus, in Chapter 3, I describe how the SAT framework specifies the causal mechanism (named the perception-choice process) by which a person perceives and chooses to perpetrate an act of moral rule-breaking, and suggest that the analytical approach advocated by SAT may serve to improve our understanding of what moves a person to perpetrate violence against a partner.

In Chapter 4, I turn to the issue of motivation, namely how the causal process in SAT is instigated. SAT differs to the majority of criminological theories in that it specifies the importance of distinguishing motivation from causal process, and emphasises the need of criminological theories to recognise that motivation for crime is differential (Treiber, 2017; Wikström et al., 2012). According to SAT, not everyone is equally motivated to commit crime, and an offender (even a frequent offender) is not consistently in a state of motivation (Treiber, 2017; Wikström et al., 2012). For SAT, motivation is "necessary but not sufficient" for crime to happen (Wikström et al., 2012, p. 23). Motivation is necessary because it instigates the causal process: if a person is not motivated, the causal process will not become activated, and he or she will not commit an act of crime. However, motivation for crime is not sufficient for crime to happen; rather, it is the causal mechanism, which is activated by a person experiencing motivation, that determines whether or not a person sees and chooses moral rule-breaking as an action alternative (Wikström et al., 2012).

SAT specifies two types of motivation that may instigate moral rule-breaking: temptations and provocations (e.g. Wikström, 2006). However, Chapter 4 concentrates on provocation as the instigator of IPV. Chapter 4 provides a novel contribution to the SAT theoretical literature by further developing SAT's conceptualisation of provocation as motivation for moral rule-breaking. Further, the chapter considers how SAT's characterisation of provocation as motivation for moral rule-breaking can be applied to the explanation of IPV. Pertinent IPV literature is reviewed, and partner conflict (arguments and disagreements) is defined as the experience of provocation; a tendency to experience anger towards a partner (defined within this thesis as partner-specific friction sensitivity) and low partner cohesion are defined as key factors leading to partner conflict. Moreover, by identifying a tendency to experience anger towards a partner and partner cohesion as factors that influence a person becoming motivated to engage in IPV, Chapter 4 illustrates *how*

these established correlates of IPV may *indirectly* contribute to a person perpetrating violence against a partner. Subsequently, it is hypothesised that high partner-specific friction sensitivity and low partner cohesion indirectly influence individuals' use of violence against a partner by influencing levels of partner conflict (i.e. frequency of provocation).

Chapter 4 concludes by reminding the reader that while SAT submits that the experience of motivation is necessary for moral rule-breaking, it is not sufficient (Wikström et al., 2012). Rather, motivation (i.e. provocation in the form of partner conflict) signifies the instigation of the causal process leading to action in the SAT framework. Accordingly, Chapter 4 closes by hypothesising that it is between experiencing partner conflict and perpetrating an act of IPV (or not), that morality exerts its influence by guiding people's perception towards or away from IPV as an action alternative.

Despite the necessary role that motivation is argued to play in SAT's explanation of why people break moral rules, the focus of SAT research has been on testing the causal process rather than the motivation and causal processes in conjunction. In testing SAT's suppositions regarding the relationship between motivation and causal processes, this research provides a novel contribution to the theoretical and empirical SAT literature.

Part 3 of the thesis (Chapters 5 and 6) describes the method and analytical strategy that are adopted in this thesis. Chapter 5 provides an overview of the longitudinal Peterborough Adolescent and Young Adult Development Study (PADS+), the study from which the data analysed in this thesis is taken. PADS+ is a study that was developed by Per Olof Wikström to test SAT with a representative community sample (Wikström et al., 2012). The data analysed in this thesis is taken from Wave 8 of PADS+ when participants were 24 and 25 years old. Chapter 5 discusses the relevance of the characteristics of the sample at Wave 8 to the study of IPV, and describes the method of data collection used by PADS+. Next, Chapter 5 describes and provides descriptive statistics for the measures used to capture and collect data on the key variables of interest in this thesis: IPV perpetration frequency, level of partner conflict, partner cohesion, partner-specific friction sensitivity, and IPV-specific morality.

Chapter 6 gives an overview of the theoretical model to be tested and the research questions to be addressed in the ensuing results chapter (Chapter 7), and describes the analytical strategy and the principal statistical techniques adopted in this thesis. The statistical approach used in this thesis is path analysis. Path analysis is an elegant and robust technique ideally suited to theory testing

because it allows for the simultaneous testing of hypothesised relationships between multiple variables (Hayduk, Cummings, Boadu, Pazderka-Robinson, & Boulianne, 2007; Hu & Bentler, 1999). In Chapter 6, I provide an introduction to path analysis, describe the process and rationale underlying the selection of an estimation method (specifically, a method that is appropriate for analysing positively skewed data), and explain how the statistical model is assessed for how well it fits with the theoretical model. Chapter 6 also describes, and provides the rationale for, the statistical methods that are used in this thesis to carry out multiple group comparisons and tests of moderation effects. Chapter 6 concludes by acknowledging some methodological limitations, which should be borne in mind when appraising the results of the analyses presented in Chapter 7.

Part 4 (Chapter 7) tests the theoretical model and systematically addresses the research questions set out in Chapter 6. Findings of the analyses are presented and preliminary interpretation of the findings is provided. Chapter 7 provides evidence in support of the hypotheses of this research, and thus illustrates how this thesis makes a novel empirical contribution to the understanding of IPV from a criminological perspective.

First, the results presented in Chapter 7 show that that both high partner-specific friction sensitivity and low partner cohesion indirectly contribute to increased IPV perpetration frequency by influencing the level of partner conflict. Second, IPV morality is shown to have a significant moderating effect. IPV morality is shown to have a broad moderating effect across the model by influencing the strength of the indirect paths of the model (illustrated by tests of moderated mediation). However, and perhaps most important for SAT, IPV morality is shown to have a significant moderating effect between partner conflict (motivation for IPV) and IPV perpetration. Individuals with weak IPV morality and who frequently engage in partner conflict are significantly more likely to perpetrate acts of IPV than individuals with strong IPV morality who engage in frequent conflict with a partner. This finding supports SAT's supposition that motivation (partner conflict) is necessary for moral rule-breaking, but is not sufficient. Rather, it appears that individuals' personal IPV morality influences their response to motivation by guiding their perception either towards or away from IPV as an action alternative. This pattern is shown to hold across males and females. Thus, in line with the aims of the thesis, Chapter 7 shows that the explanatory power of the SAT framework extends to IPV, and that the framework can explain both male and female IPV perpetration.

Part 5 (Chapter 8) begins with a summary and discussion of the implications of the findings of the thesis in relation to previous relevant theory and research. Next, Chapter 8 considers the policy implications of the findings of the research with regard to the prevention of IPV. Chapter 8 concludes with a discussion of the limitations of the study presented in this thesis and recommendations for future research.

PART 1: Providing Context

1: Situating Intimate Partner Violence as an Issue of Criminological Relevance

This chapter introduces the context and rationale of the study. I begin by defining intimate partner violence (IPV) as it is set out in the partner violence literature, and illustrate how this definition has been adopted by the UK Government and the criminal justice system of England and Wales. I then provide clarification on the how this definition of IPV is applied within the context of the thesis, and present the rationale for adopting a gender inclusive definition of IPV. I then give an overview of the transition of IPV from a behaviour that was hidden 'behind closed doors', largely ignored by the criminal justice system, to a behaviour recognised and taken seriously as criminal violence.

Criticism of the criminal justice system's neglect and ineffective response to the problem of IPV prompted a series of influential criminological studies concerned with the policing of IPV (see e.g. Sherman, Schmidt, & Rogan, 1992). However, recognition of IPV as criminal violence did not instigate a similar flurry of research concerned with understanding the causes of IPV from a criminological perspective. Rather, the causes of IPV were (and continue to be) considered by prominent IPV scholars (e.g. Dobash & Dobash, 1979) to be distinct from the causes of general violence and crime. It follows that the final section of this chapter addresses the objection and neglect of criminological explanations of IPV, specifically, the objection to understanding IPV within the context of general theories of criminal violence and general theories of crime. I conclude by contending that as a behaviour that clearly violates the criminal law, it is appropriate to understand and explain the causes of IPV within the framework of a general theory of crime, specifically situational action theory (SAT). In doing so, I highlight the novel contribution that this thesis makes to both the IPV and SAT theoretical and empirical literatures.

1.1 Defining Intimate Partner Violence

Throughout this thesis, I use the term 'intimate partner violence' (IPV) to refer to acts of violence that occur between individuals in an intimate (i.e. romantic and/or sexual) relationship. IPV is a contemporary, gender-neutral term for what has traditionally been referred to as 'domestic abuse', 'wife abuse', and similar phrases that place women and children as the victims of male perpetrated violence. The adoption of the term 'IPV' narrows the focus to concentrate on acts of aggression and violence between intimate partners, rather than wider domestic and family relationships (such as between parents and children), and acknowledges that both men and women can be victims and/or perpetrators (e.g. Straus, 1999). Furthermore, the term 'IPV' recognises that violence can occur within both heterosexual and same-sex intimate relationships, and is not restricted to marital and/or cohabiting partnerships (M. P. Johnson & Ferraro, 2000; Sorenson & Thomas, 2009; Straus, 1999).[3] Whether individuals are in a dating, cohabiting, or marital relationship, each "are intimate relationships where intimacy problems play out" (Dutton & Nicholls, 2005, p. 697). The use of the term 'IPV' thus reflects the inclusive approach to both gender and relationship status taken within this thesis.

Similarly, the UK Government defines domestic violence and abuse (of which IPV is a category) as "Any incident or pattern of incidents of controlling, coercive, threatening behaviour, violence or abuse between those aged 16 or over who are or have been intimate partners or family members regardless of gender or sexuality" (Home Office, 2012, p. 19).[4] The abuse covered by the definition is broad, and ranges from physical abuse, through to emotional and financial abuse (Home Office, 2012). Moreover, the government's definition also recognises that partner violence is not restricted to heterosexual marital relationships, nor is it only perpetrated by males against female victims (see further, Section 1.1.1).[5]

As illustrated by the government's definition of domestic violence and abuse, a broad array of behaviours constitute abuse, IPV does not simply denote physical violence. IPV scholars have noted that the characterisation of IPV has "evolved from physical assault alone to include sexual

[3] A paper published by Makepeace (1981) is often cited as being ground-breaking work that pointed to the prevalence of IPV within dating relationships (see e.g., Shorey, Cornelius, & Bell, 2008).
[4] This reference pertains to a consultation summary; the definition was adopted in March 2013 (Home Office, 2016).
[5] Note that the Home Office definition of IPV is adopted by the police forces (Her Majesty's Inspectorate of Constabulary, 2014) and Crown Prosecution Service (see the CPS 'Domestic Abuse Guidelines for Prosecutors'; Crown Prosecution Service, 2017). In England and Wales, the CPS is the faction of the criminal justice system concerned with criminal prosecutions (Crown Prosecution Service, 2009).

assault, psychological maltreatment, and stalking" (Sorenson & Thomas, 2009, p. 337; see also e.g. Gelles, 1990). However, the focus of this research is restricted to intended acts of physical violence against an intimate partner. The complex nature of IPV (i.e. that it can refer to physical, psychological, and coercive behaviours) means that refining the focus of study to physical violence alone allows for a more "manageable field of analysis" (Kirschner & Malthaner, 2011, p. 5). In line with this reasoning, addressing one form of IPV is a standard protocol in much IPV research (Straus, 1999). Yet, research that concentrates on physical IPV can be faced with the criticism that doing so ignores the broader context in which violence occurs, namely the psychological and emotional abuse that can occur alongside, or in isolation of, physical violence ; Reitzel-Jaffe & Wolfe, 2001). However, the decision to restrict the focus of this thesis to acts of physical violence should not be taken as a disregard for these issues.

In this brief section, I have laid out the general definition of IPV that is found in the partner violence literature, and identified how this definition has been modified for use in this thesis. In Chapter 2 (Section 2.3.2), I further develop the definition of IPV in accordance with the principles of the theoretical framework of this thesis. As noted in the introductory chapter, the guiding framework of the research is SAT (e.g. Wikström et al., 2012), a criminological theory of moral rule-breaking action. Accordingly, in Chapter 2 I delineate SAT's definition of crime as acts of moral rule-breaking and establish how this definition can extend to physical IPV.

1.1.1 Why Adopt a Gender Inclusive Approach? A Note on the Gender Debate

Within this thesis I adopt the gender inclusive definition of IPV. However, the issue of whether IPV should be defined and understood as behaviour predominantly perpetrated by males against females (referred to as gender asymmetry), or whether it should be defined and understood as behaviour that it perpetrated at equal rates by males and females (referred to as gender symmetry), is a highly polemic issue within the IPV literature (for overviews see, Kimmel, 2002; Straus, 1999).[6] It is generally considered that the 'gender debate' ensued when Straus and colleagues (e.g. Straus et al., 2006 [1980]) published findings from their family conflict research study: The

[6] Please see Footnote 1 in the introductory chapter where I acknowledge the distinction between sex and gender, and the interchangeable use of the terms that is prevalent in the IPV literature.

National Family Violence Survey (NFVS).[7] The NFVS used the (then) newly developed Conflict Tactics Scales (CTS; Straus, 1979), which provided a quantitative self-report measure of the prevalence and frequency of IPV perpetration and victimization (see Chapter 5 for further description of the CTS). When comparing men's and women's use of violence it was found that 12.1% of men and 11.6% of women admitted to having perpetrated at least one act of violence against their partner in the previous year (see Straus et al., 2006 [1980], p. 36). When examined further, it was found that where violence had been reported, 49% of the violence occurred in situations where both individuals in the relationship were violent; while where only one of the pair were violent, 27% were male-only perpetrator situations and 24% were female-only perpetrator situations (see Straus et al., 2006 [1980], p. 37). Moreover, both men and women were reported to have perpetrated what are considered severe acts of violence, such as punching and slapping (Straus et al., 2006 [1980]). Thus, the findings reported by Straus and colleagues were taken to be indicative of gender symmetry: both men and women were victims and perpetrators of IPV at roughly equal rates.[8]

The gender symmetry in incidence rates of IPV perpetration found by Straus and colleagues was discordant with the traditional view of partner violence, namely that IPV is a male-perpetrated phenomenon driven by patriarchal social structures and ideology (Dobash & Dobash, 1979; Dutton, 1995; Hotaling & Straus, 1980; Straus, 1976; Yllö & Straus, 1990). It follows that the gender symmetry argument and associated research has been severely criticised by those who maintain that IPV perpetrators are predominantly male (e.g. DeKeseredy, 1999; Dekeseredy & Dragiewicz, 2007; Dobash et al., 1992; Harwin, 2006). Further, those who strongly reject the argument of gender symmetry continue to produce research evidence of violent and abusive males and victimised females (e.g. DeKeseredy & Kelly, 1993; DeKeseredy, Saunders, Schwartz, & Alvi, 1997; Dekeseredy & Schwartz, 1998; Dobash & Dobash, 1979, 1998, 2001, 2004; Dobash, Dobash, Cavanagh, & Medina-Ariza, 2007; Dobash, Dobash, Cavanagh, & Lewis, 1998; Dobash, et al., 1992; Gondolf, 2007; Mooney, 2000; Walker, 1983).

[7] The NFVS was a large representative community sample study carried out in the United States in 1975 and again in 1985. The NFVS was designed to understand the social risk factors underlying family violence (Straus, 1990; Straus et al., 2006 [1980]).

[8] Note that much of the gender debate concerns physical violence. However, the debate also extends to discussions of whether men and women use psychological abuse in the same way and whether there are differences between males and females with regard to the impact of experiencing psychological abuse (see e.g. Follingstad, Dehart, & Green, 2004; Follingstad & Rogers, 2013; McHugh, Rakowski, & Swiderski, 2013).

However, following the initial gender symmetry finding from the NFVS, 100s of studies (using both the CTS and other methods of measurement), including large scale national and cross-national studies, have continued to replicate the finding of gender symmetry in rates of IPV perpetration (e.g. Archer, 2000, 2002; Ehrensaft, Moffitt, & Caspi, 2004; Fergusson, Boden, & Horwood, 2008; Follingstad, Wright, Lloyd, & Sebastian, 1991; Giordano, Millhollin, Cernkovich, Pugh, & Rudolph, 1999; Hines & Douglas, 2010; Hines & Saudino, 2003; Jenkins & Aube, 2002; Malone, Tyree, & O'Leary, 1989; Messinger, Davidson, & Rickert, 2011; Moffitt, Caspi, Rutter, & Silva, 2001; Morse, 1995; O'Leary et al., 1989; Renner & Whitney, 2012; Straus, 2004, 2008; Whitaker, Le, & Niolon, 2010). For instance, a meta-analysis carried out by Archer (2000) reviewed close to 100 studies, most of which had used the CTS (Straus, 1979) or the revised version of the CTS (Straus, Hamby, Sue, & Sugarman, 1996), and found evidence of gender symmetry in IPV perpetration, including frequency of IPV perpetration. Moreover, Archer (2000) found that females were marginally *more* violent than men.

It follows that the longevity of the gender debate is maintained, in part, by both positions receiving support from a myriad of research evidence. A detailed consideration of the factors that underlie the promulgation of the gender debate is beyond the scope and focus of this chapter. However, the gender debate permeates many areas of the IPV theoretical and empirical literature, and will be referred to as appropriate throughout the thesis.

A further consideration that underlies a gender inclusive approach to understanding the causes of IPV is the body of research that has shown IPV within same-sex relationships to be as prevalent as it is in heterosexual relationships (Alexander, 2002; Elliot, 2004; Murray & Mobley, 2009; Stiles-Shields & Carroll, 2015).[9] For example, Alexander (2002) noted that research of abuse (psychological and physical) in same-sex relationships typically yields prevalence rates of between 25% and 50%. Furthermore, Burke and Follingstad (1999) note from their review of studies of same-sex IPV, that the "Risk markers and correlates of intimate violence in same-sex relationships are notably similar to those associated with heterosexual partner abuse" (p. 508), for example, low relationship cohesion and satisfaction are shown to correlate with IPV in both heterosexual and same-sex relationships.

[9] The gender debate chiefly has concerned the issue of gender a/symmetry of IPV perpetration in heterosexual relationships, rather than whether males (irrespective of sexual identity or orientation) perpetrate more IPV than females (irrespective of sexual identity or orientation).

The purpose of drawing the reader's attention to the gender debate and the prevalence of IPV in same-sex relationships at this point has been to illustrate why the definition of IPV set out in contemporary government and criminal justice policy is often gender inclusive. Regardless of one's position on the *ratio* of male and female IPV perpetrators and victims, the wealth of research evidence has shown, irrespective of sexual orientation, that men can be and are victims of IPV, and that women can be and are perpetrators of IPV. This evidence is reflected in the government's definition of IPV.

Notwithstanding the current gender inclusive definition of IPV that has been set out by the UK Government, and which has been adopted by the criminal justice system of England and Wales, much of the scholarship concerning the emergence of IPV as a serious socio-political and legal issue refers to violence against women. Traditionally, it has been concern over men's violence against women (e.g. 'wife abuse') "that has propelled much of the domestic violence movement" (Murray & Mobley, 2009, p. 363), and has been the topic of discussions (and criticisms) concerning the treatment of IPV as a criminal matter (see e.g. Dobash & Dobash, 1981). It is to the emergence of IPV as serious criminal justice issue that I now turn.

1.2 The Emergence of Intimate Partner Violence as a Serious Criminal Justice Issue

Intimate partner violence (and family violence more broadly) was traditionally considered a private, rather than a public (and thus criminal) matter (Dobash & Dobash, 1981; Mooney, 2000; Pleck, 1989; Pollitz Worden, 2000).[10] However, over the course of the last 40 years or so, it has become increasingly acknowledged that violence between intimate partners should not be ignored by the criminal justice system (e.g. Mills, 1998; Starmer, 2011).

While it is widely acknowledged that until relatively recently IPV was neglected by the criminal justice system, there is some confusion and disagreement with regard to whether, historically, it was legally permissible for men to use violence against their wives. Scholars and activists working in the field of IPV frequently refer to the 'rule of thumb' as evidence of men's historical *legal* right

[10] Note that my focus is restricted to countries where the legal system was influenced predominantly by English common law (such as the United States, Australia, and New Zealand). Furthermore, when I refer to 'the law' I am referring predominantly, and broadly, to the legal systems of the UK and the USA.

to hit their wives (see e.g. Buzawa & Buzawa, 2003; Dobash & Dobash, 1979; Freeman, 1981; Harwin, 2006). The 'rule of thumb' has been attributed to an English judge, Judge Buller, in a comment he purportedly made in the late eighteenth century (e.g. Pleck, 1989). It follows that the 'rule of thumb' is often cited as an old English common law, which permitted a husband to chastise his wife by hitting her, so long as he used a stick no thicker than his thumb (H. A. Kelly, 1994; Straton, 2002).[11] However, while the 'rule of thumb' is widely cited as fact, other scholars have shown that it was never actually part of English common law (e.g. Hoff Sommers, 1994; H. A. Kelly, 1994; Pleck, 1989). Yet, this is not to say that the law was not permissive of a husband's use of 'moderate' violence against his wife (Pleck, 1989; Straton, 2002).

Notwithstanding the tendency of the law to turn a blind eye to less severe violence (i.e. violence that did not result in injury), Pleck (1989) notes that for centuries, IPV (specifically men's violence against women) has in fact been regarded as criminal behaviour, although the level of public concern and severity of punishment has varied. Furthermore, while IPV may have been acknowledged as criminal behaviour, it was rarely considered an *appropriate* matter for the criminal law (Buzawa & Buzawa, 2003; Dobash & Dobash, 1992, 1981; Pollitz Worden, 2000). To this point, Buzawa and Buzawa (2003) note that, historically, the private institution of the family has been viewed through an almost sacred lens as the cornerstone of society, and for the state to interfere with the family was to risk causing "incalculable harm to the family" and thus society (p. 3). It follows that where cases of IPV did come to the attention of the legal system, they were typically diverted to social and psychological services, and where considered appropriate, dealt with under civil, rather than criminal, law (Buzawa & Buzawa, 1979, 1993, 2003; Dobash & Dobash, 1992).

However, the women's movement of the 1970s challenged the view that the criminal law should not interfere with the institution of the family (Mills, 1998; Pleck, 1989), and severely condemned the police and judicial neglect of IPV as a criminal matter (see e.g. Dobash & Dobash, 1979, 1992). This condemnation created the "political pressure" that instigated a reform in the way that IPV was policed and prosecuted in a number countries, such as the UK and USA (Buzawa & Buzawa, 2003, p. 89; see also Buzawa & Buzawa, 1979, 2003; Dasgupta, 2002; Ferraro, 1989; Harwin, 2006;

[11] Although the 'rule of thumb' is ascribed to English common law, legal systems (e.g. in the USA) based on English common law have (on occasion) used the 'rule of thumb' to guide court rulings regarding men's violence against women (Buzawa & Buzawa, 2003; Straton, 2002). Consequently, the 'rule of thumb' is often cited in the IPV literature generated by British and American scholars as evidence of a man's historical legal right to hit his wife.

Pleck, 1989; Pollitz Worden, 2000; Stanko, 1995). Thus, in recent decades IPV has been increasingly recognised as a serious matter for the criminal law (Buzawa & Buzawa, 2003; Davis & Cretney, 1996; Mills, 1998; Pollitz Worden, 2000; Sanders, 1988; Starmer, 2011). Indeed, Smartt and Kury (2006) observe that "It is now taken as read that most industrialised nations are now addressing changes in legislation to incorporate domestic violence" (p. 395).

Of relevance to the context of the present thesis, in England and Wales, the policies of the police and CPS regarding the treatment of IPV have evolved considerably (e.g. Starmer, 2011). Violent acts committed between intimate partners (regardless of gender or sexual orientation) are now recognised to be governed by the same criminal laws as the equivalent acts committed in the public domain (Crown Prosecution Service, 2009; Davis & Cretney, 1996; Home Office, 2000, 2014).[12] Moreover, following criticism of ineffectual prosecution (see e.g. Davis and Cretney) the CPS now asserts that "Stopping domestic violence and bringing perpetrators to justice is … a priority for the CPS" (Crown Prosecution Service, 2009, p. 3).

While under English and Welsh law there is currently no separate crime of domestic violence, guided by the government's definition, the CPS can seek to prosecute individuals who perpetrate acts of IPV and familial violence under existing criminal legislation (Crown Prosecution Service, 2009).[13] For example, the CPS suggests that physical violence such as pushing, slapping, or punching may correspond with offences such as common assault, actual bodily harm, or grievous bodily harm; while stopping a partner from seeing friends or family may correspond with the offences of false imprisonment, kidnapping, or harassment (Crown Prosecution Service, 2009; see p 69-73 for a table of more examples of abusive behaviours and [possible] corresponding offences).[14]

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[12] As well as criminal justice reform in England and Wales, in recent decades, significant changes to civil law regarding IPV and family violence have been implemented in order to afford greater protection to victims of family violence, as Burton (2009) notes: "since the 1970s there has been a range of civil remedies specifically for victims of domestic violence" (p. 109). The "civil remedies" referred to by Burton (2009) are non-molestation orders and occupation orders; these remedies come under the part IV of the Family Law Act 1996 (FLA) which was amended by the Domestic Violence Crime and Victims Act 2004 (DVCVA) in order to broaden the accessibility of the remedies of the FLA, and to "strengthen the provisions for enforcement", namely that people who break the conditions of the civil remedies of the FLA can now be subject to criminal punishment (Burton, 2009, p. 110).

[13] See also the CPS 'Domestic Abuse Guidelines for Prosecutors' (Crown Prosecution Service, 2017).

[14] While there is no crime of domestic violence under English and Welsh law, in 2015 an offence of coercive and controlling behaviour within the context of domestic abuse (which refers to both IPV and broader abuse within families e.g. parent to child abuse) came into effect. The offence is part of the Serious Crime Act 2015 (section 76) (Home Office, 2015). The introduction of the new offence is in response to "a gap in the law around patterns of controlling or coercive behaviour that occurs during a relationship … This offence sends a clear message that this form of domestic abuse can constitute a serious offence" (Home Office, 2015, p. 3)

1.3 Criminology and Intimate Partner Violence: A Focus on Policing

Many of those involved in women's advocacy had been highly critical of the tendency of police officers to avoid making arrests when called to violent domestic incidents, arguing that the police should "enforce the law to deter such acts in the future" (Sherman & Berk, 1984, p. 263). In line with the recognition that policing of IPV required reform, criminologists began (and continue) to study how altering the police response to IPV could be improved (e.g. Berk, Campbell, Klap, & Western, 1992; Buzawa & Austin, 1993; Chalk & Garner, 2001; Diemer, Ross, Humphreys, & Healey, 2017; Ferraro, 1989; Maxwell, Garner, & Fagan, 2002; Schmidt & Sherman, 1993; Sechrist & Weil, 2017; Sherman & Berk, 1984; Tolman & Weisz, 1995). In particular, criminologists began to examine how arrest for IPV could deter future violence against a partner (see below). A comprehensive review of the criminological literature concerning the policing of IPV is beyond the scope of this chapter, however I draw the reader's attention to a study that is arguably one of the most famous and impactful studies of the policing of IPV: The Minneapolis domestic violence experiment (Sherman & Berk, 1984).

Following the observation (and criticism) that rather than arresting IPV offenders, the police had traditionally employed less punitive measures, such as providing mediation or ordering the perpetrator (often the male) to leave the home for a short period of time (see e.g. Buzawa & Buzawa 1993, 2003, for an overview of the traditional police attitudes and approaches to dealing with IPV incidents), Sherman and Berk (1984) sought to examine the effect of arrest on IPV perpetration. Namely, they examined whether adopting a more punitive police response to IPV incidents would deter further violence and thus prevent more serious (even deadly) violence in the future (Sherman & Berk, 1984).

The Minneapolis domestic violence experiment employed a randomised control experimental design, whereby police officers responding to minor domestic incidents were randomly assigned one of three conditions: enforce a period of separation, provide mediation, or arrest the perpetrator (Sherman & Berk, 1984). At a six-month follow-up, it was found that arrest had the strongest effect: those IPV perpetrators who had been arrested had the lowest rate (by about 50%) of recidivism for IPV compared to the other experimental conditions (Sherman & Berk, 1984). This finding was taken to suggest that "swift imposition of a sanction of temporary incarceration may deter male offenders in domestic assault cases" (Sherman & Berk, 1984, p. 270).

Following (in part) the findings of the Minneapolis domestic violence experiment reported by Sherman and Berk (1984), 15 states across America implemented mandatory arrest policies for domestic assault (Schmidt & Sherman, 1993). Similarly, in the late 1980s and early 1990s police officers in the UK were encouraged (rather than mandated) to arrest perpetrators when called to domestic disputes (C. Hoyle, 1998; Matczak, Hatzidimitriadou, & Lindsay, 2011). In addition to strengthened policing, the criminal prosecution of IPV also increased across countries such as the USA, UK, Australia, and New Zealand (Carswell, 2006; Cook, Burton, & Robinson, 2005; Mills, 1998; A. L. Robinson & Stroshine, 2005).

However, six replication studies of the original Minneapolis domestic violence experiment produced a mixture of results, some of which cast doubt on the effectiveness of arrest in deterring future IPV (Berk et al., 1992; Schmidt & Sherman, 1993; Sherman, Schmidt, et al., 1992). Put simply, it was found that arrest did not have a consistent positive impact for victims, rather arrest served to deter future violence in some perpetrators but appeared to have an exacerbating effect in other perpetrators (Berk et al., 1992; Schmidt & Sherman, 1993; Sherman, Schmidt, et al., 1992). In particular, Schmidt and Sherman (1993) report that arrest seemed to have a deterrent effect where perpetrators were employed, but arrest was associated with increased IPV perpetration in men who were unemployed. It was suggested that those who were unemployed had "a low stake in conformity" (Sherman, Smith, Schmidt, & Rogan, 1992, p. 686), and were therefore less susceptible to the deterrent effect of arrest. It was also found that in some cases, arrest had an initial deterrent effect, but in the long-term, IPV increased significantly. Subsequently, Sherman and colleagues (1992) advised the removal of mandatory arrest polices and the implementation of a more discretionary approach to arrest.[15] However, warnings about the possible deleterious effects of mandatory arrest were not heeded by officials, and the strengthened police response continued to be encouraged (Maxwell et al., 2002).

Many feminist scholars and activists "heartily endorsed changes that increased [police] involvement in intimate disputes and family violence" (Buzawa & Buzawa, 1993, p. 568). For example, Stark (1993) advocated the arrest of (male) IPV perpetrators in order to make clear that IPV is not acceptable and violates the criminal law. However, it should be noted that the treatment

[15] However, it should be noted that Maxwell, Garner, and Fagan (2002) carried out a re-analysis of the data from the replication studies, which provided evidence that "arrest provides additional safety to female victims of intimate partner assault" (p. 66). Accordingly, Maxwell and colleagues (2002) advocate "the continued use of arrests as a preferred law enforcement response for reducing subsequent victimization of women by their intimate partners" (p. 70).

of IPV as a more general form of criminal violence by the criminal justice system has been subject to intense debate, particularly amongst those working to stop male-to-female IPV (Carswell, 2006; Pence, 1999; A. L. Robinson & Stroshine, 2005; Stanko, 1995). Put simply, while one position is to argue that IPV should be subject to the same criminal law and prosecution process as general criminal violence, the other position contends that IPV is qualitatively different to general criminal violence (i.e. the social context of IPV, and the intimate nature of the relationship between the victim and the offender) and the processes of arrest and prosecution should take account of this (Davis & Cretney, 1996; B. Hart, 1993; C. Hoyle & Sanders, 2000; Pence, 1999).[16] Thus, while there is general agreement that IPV should be understood and taken seriously as criminal behaviour, there is disagreement about how IPV should be policed and prosecuted.

However, the point of this chapter is not to evaluate *how* IPV is policed and prosecuted, but to illustrate that IPV *is* policed and prosecuted. In doing so, this chapter sets the foundation for studying IPV as a type of criminal (moral rule-breaking) action. More specifically, the purpose of this section has been to show how the criticism directed at the police response to IPV incidents prompted a wealth of criminological research into the policing of IPV. Yet, the recognition that IPV is a serious criminal matter did not yield a flurry of theoretical and empirical literature that sought to explain the causes of IPV within the frameworks of general theories of crime. Rather, while the policing of IPV became a prominent field of scholarship within criminology, theories of IPV developed quite separately.

[16] For example, some researchers have criticised the gender inclusive approach that police forces in countries such as the USA and UK have taken when implementing mandatory and pro-arrest policies (Dasgupta, 2002; Hester, 2013). The more punitive and rigid arrest policies regarding IPV have resulted in large numbers of female arrests for IPV related offences (e.g. Chesney-Lind, 2002), which has been described variously as one of the "unintended consequences of mandatory arrest" (Frye, Haviland, & Rajah, 2007, p. 398), "an extraordinary twist of circumstances" (Dasgupta, 2002, p. 1365), and "gendered injustice" (Hester, 2013, p. 13). It follows that Dasgupta (2002) and others have viewed the increasing numbers of women arrested for IPV related offences as indicative of the unsuitability of mandatory arrest for IPV, and have advocated the need for "appropriate responses to women charged with domestic violence" (Dasgupta, 2002, p. 1366). Similarly, Chesney-Lind (2002) suggests that the context (e.g. the motive) of females' violence should be taken into account by police officers and prosecutors, while Hester (2013) has called for a "gender-sensitive approach" to be adopted by police when attending an incident of IPV and distinguishing the perpetrator and victim (p. 13).

1.4 Addressing the Objection and Neglect of Criminological Explanations of Intimate Partner Violence

> despite the growing evidence that criminal violence frequently occurs between family members as well as between acquaintances and strangers, criminologists today continue to study these patterns separately
>
> (Fagan & Browne, 1994, p. 117)

> violence towards women is viewed as a special case, unrelated to other forms of violence and other forms of crime
>
> (Dixon et al., 2012, p. 198)

A systematic review of risk factors for (male and female) IPV perpetration by Capaldi, Knoble, Shortt, and Kim (2012) found that many IPV risk factors are also risk factors for crime. Accordingly, Capaldi and colleagues (2012) suggest that "IPV is theoretically and intraindividually akin to these [criminal] behaviors" (p. 25). Yet, it has been noted that academics working in the field of IPV research and theory development have tended to eschew criminological perspectives of the causes of IPV, preferring to develop specialised theories of the causes of IPV (Fagan & Browne, 1994; Hotaling, Straus, & Lincoln, 1990; Moffitt, Krueger, Caspi, & Fagan, 2000; Piquero, Theobald, & Farrington, 2014; Smithey & Straus, 2004).[17]

Those working in the field of IPV research and victim advocacy typically consider IPV to have different aetiological roots to other forms of violent crime. For example, Carolyn Hoyle and Sanders (2000) suggest that while "the two types of assault [partner violence and non-partner

[17] This is not to say that criminologists have not assessed the ability of certain general theories of crime to explain IPV. However, the body of literature is small and has tended to yield inconsistent and/or moderate support for the generalisability of these theories to IPV. For example, studies have applied Akers' social learning theory of crime (e.g. Akers, 1998) to IPV (Sellers et al., 2005; Wareham, Boots, & Chavez, 2009); others have applied Gottfredson and Hirschi's (1990) self-control theory (Avakame, 1998; Gulledge, 2016; Moffitt et al., 2000; Sellers, 1999), and Agnew's (e.g. Agnew, 1992) general strain theory (A. S. Anderson & Lo, 2011). However, I do not provide a review and critique of this research. The purpose of this footnote is to acknowledge that while there is a paucity of research that has applied general theories of crime to IPV, such research does exist. Therefore, the current research does not proclaim to be the first study to attempt to explain IPV within a criminological framework, rather it is the first to apply SAT to IPV.

violence] are legally identical, they are sociologically distinct" (p. 14). Similarly, it is typically suggested that the nature and context of the relationship between victim and perpetrator further distinguishes IPV from more general criminal violence (Dobash et al., 1992; Gelles & Straus, 1979; Gordon, 2000; C. Hoyle & Sanders, 2000), which can correspond with "complications for effective legal control" (Fagan, 1996, p. 28). Thus, IPV is considered by some scholars to be a distinct type of violence that cannot, and should not, be explained within broader theories of violence and crime. A further key illustration of this position comes from Dobash and Dobash (1979), who are particularly critical of attempts to explain IPV and general violence within the same framework:

> Considering violence or aggression as a single abstraction is often done in an attempt to create theoretical models in which it is mistakenly thought will provide overall explanations for many, if not all, forms of violence. What this in fact does is to obscure or ignore the very real and significant differences between various forms of violent behavior, and this results in confusion rather than clarity (p. 8).[18]

Adding to the fragmentation is the debate concerning whether explanations of IPV should be gender-specific or gender inclusive. Again, Dobash and Dobash, major proponents of gender-specific analyses of IPV, have contended that when it comes to violent behaviour, there are fundamental differences in the way that men and women think and act:

> In fact there is a great deal of evidence that men's and women's psychologies are not at all alike in this domain. Men's violent reactions to challenges to their authority, honor, and self-esteem are well-known (e.g. Athens 1980, Luckenbill, 1977, Toch, 1969); comparable behavior by a woman is a curiosity (Dobash et al., 1992, p. 84).

However, it is worth noting that Toch (1992 [1969]), reports on the findings of a study of criminally violent men only; while Luckenbill (1977) is a study of 'criminal homicide' generally, and does not specify the male-female breakdown of the perpetrators; and Athens (1980) describes and reports on the findings of a study of 'violent criminality' in men *and* women. Thus, taken together, these studies refer to criminally violent individuals, not men specifically, and are not representative enough to make generalised assertions regarding the nature of male violence and the 'curiosity' of female violence *within the context of IPV*, especially when IPV scholars such as Dobash and Dobash (1979) have contended that it is inappropriate to apply general theories of criminal violence to the explanation of IPV.

[18] It should be noted that Dobash and Dobash focus their work unequivocally on violence against women. Nevertheless, their point against a general explanatory framework still holds.

Nevertheless, the argument made by Dobash and colleagues (1992) reflects the common belief that men have a natural tendency to be more aggressive than women; however, it has been suggested that women are not as passive as traditionally thought (e.g. Richardson, 2005; J. W. White & Kowalski, 1994). Indeed research from the IPV literature that has sought to compare the aggressive behaviour of males and females inside and outside of intimate relationships has shown that while men tend to be more aggressive outside of intimate relationships, women are more violent within intimate relationships (Bates, Graham-Kevan, & Archer, 2014; Cogan & Fennell, 2007; Cross, Tee, & Campbell, 2011; Malone et al., 1989; Thornton, Graham-Kevan, & Archer, 2015). Moreover, other research has shown that female perpetrated IPV is more socially acceptable and considered to be less serious than male perpetrated IPV (Dardis, Edwards, Kelley, & Gidycz, 2015; Feld & Felson, 2007; O'Keefe, 1997; Taylor & Sorenson, 2005).

It follows that some scholars have made the argument for a gender inclusive approach to understanding and explaining IPV alongside criminal violence more generally (Bates, Archer, & Graham-Kevan, 2016; Dutton & Nicholls, 2005; R. B. Felson, 2006). In particular, Richard Felson (2006) has argued that a 'violence perspective' rather than a 'gender perspective' should be applied to explaining IPV. R. B. Felson (2006) posits that IPV and general criminal violence have comparable aetiological underpinnings; therefore IPV can be understood and explained in a similar way to general criminal violence (empirical support for the violence perspective is reported in R. B. Felson and Lane, 2010). Similarly, Bates and colleagues (2016) observe that IPV and general violence share a number of risk factors, and contend that IPV can be studied within a general framework of aggression. In this thesis, I will take the argument further, and contend that the causes of IPV perpetrated by both males and females can be explained and understood within the framework of a general theory of crime, namely SAT (e.g. Wikström, 2004, 2010, 2014).

1.4.1 Studying the Causes of Intimate Partner Violence from A Criminological Perspective: Summarising the Rationale

Walby (2004) observes that violence between intimates "has devastating consequences for both the individual victim and wider society. It drains the resources of public and voluntary services and of employers and causes untold pain and suffering to those who are abused" (p. 10). Further, Walby (2004) reports that the financial and social cost of violence between intimates is estimated to be in

the billions of pounds.[19] It follows that understanding the causes of IPV, and developing effective prevention and treatment based on knowledge of its causes, is a relevant and hugely valuable research endeavour.

This thesis is a first foray into understanding the causes of IPV from the criminological perspective of SAT, and thus provides a novel contribution to both the IPV and SAT theoretical and empirical literatures. Seeking to understand and explain IPV within the framework of a general theory of crime may be objected to by those who contend that the causes of IPV are distinct from general crime. Yet, it cannot be ignored that acts of IPV violate legal rules of conduct (as well as informal rules of behaviour): it is clearly stated that violence between intimate partners is subject to the same criminal legislation as violence between non-intimates (e.g. Crown Prosecution Service, 2009). Therefore, I contend that it *is* appropriate, even necessary, to develop an understanding of the causes of IPV from a general criminological perspective. This should not be taken to mean that I refute the value of specific theories of IPV, nor should it be taken to mean that I refute the value of non-criminological perspectives on the causes of IPV. Rather, my contention is that the criminal (rule-breaking) nature of IPV should not be ignored when seeking to understand its causes.

1.5 Providing Context: Chapter Summary

Within this chapter I have sought to provide the context and rationale of the current research. Namely, I have made clear the rationale for adopting a gender inclusive approach to understanding and explaining the causes of IPV, and have specified the focus of the thesis to be physical acts of IPV. I have drawn attention to the emergence of IPV from a private matter, largely ignored by the criminal law, to an issue that is a serious matter of concern to the government and criminal justice system. However, despite the recognition that violence against partners violates the same criminal laws as general criminal violence, the causes of IPV are largely studied separately from the causes of general violence and crime. I consider this to be an oversight and that understanding the causes of IPV from a criminological perspective is a valid and necessary research endeavour, which can serve to improve the prevention and treatment of IPV.

[19] Costs include, but are not limited to, the criminal and civil legal costs, health service costs, and social service costs (Walby, 2004).

This thesis presents the first application of SAT to the understanding and explanation of IPV. Thus, this thesis contributes both to the IPV literature by advancing understanding of the causes of IPV as criminal (rule-breaking) actions, but also provides a novel contribution to the theoretical and empirical SAT literature.

PART 2: Theoretical Framework and Review of Pertinent Literature

Part 2 provides a detailed consideration of situational action theory (SAT), and illustrates how SAT is an appropriate framework within which to understand and explain acts of intimate partner violence (IPV) as criminal actions. Part 2 is comprised of three chapters. This thesis concentrates on the role of morality in IPV, and thus Chapter 2 is devoted to specifying the nature and role of morality as defined by SAT, and illustrating how IPV can be defined and explained as moral rule-breaking behaviour. Chapter 3 concentrates on the *causal* framework of SAT. Chapter 3 gives a detailed description of the analytical framework of SAT, namely how SAT submits acts of moral rule-breaking should be explained, and illustrates how the SAT framework can be applied to the explanation of both male and female IPV perpetration. Chapter 4 describes the motivation process in SAT, which addresses how the causal process is activated. More specifically, Chapter 4 concentrates on provocation as the instigator of IPV, and considers how SAT's characterisation of provocation as motivation for moral rule-breaking can be applied to the explanation of IPV. Chapter 4 concludes by synthesising the causal and motivation processes of SAT, as applied to IPV in this thesis, and specifies hypotheses to be tested in Part 3.

2: The Nature and Role of Morality in Situational Action Theory

> an analysis of what constitutes a crime and what moves people to engage in acts of crime suggests that questions of personal morality and the moral context in which people operate should play a central role in the explanation of crime
>
> (Wikström, 2010, p. 211)

The causes of intimate partner violence (IPV) are not typically studied from criminological perspectives, yet, as set out in Chapter 1, IPV is clearly an issue of criminological relevance. Acts of physical violence that occur within romantic dyads are increasingly recognised, and taken seriously, as acts that break both the formal rules of law and the informal rules of behaviour (see Chapter 1). As rule-breaking actions, a grounding principle of this thesis is that physical acts of IPV are explainable within a criminological framework of rule-breaking behaviour. The criminological framework of this thesis is situational action theory (SAT), a theory of crime that positions morality at the centre of its explanatory framework. SAT submits that all acts of crime are acts of moral rule-breaking (they are moral actions), and all moral rule-breaking actions can be explained within its framework (e.g. Wikström, 2006, 2010a).

In this chapter, I provide an overview of the core assumptions that underlie the SAT framework, and delineate SAT's characterisation of the nature and role of morality in explaining why people engage in rule-breaking actions. To that end, this chapter defines IPV as a form of moral rule-breaking, and illustrates how it can be understood within a general criminological theory of moral action (i.e. SAT). I begin by highlighting the ambiguity that surrounds definitions of morality and moral behaviour, and identify the subordinate role accorded to morality in criminological theory. I then introduce SAT's core assumption regarding the rule-guided nature of human action, and clearly distinguish SAT from theories of crime grounded in the assumption of a self-interested human nature. Building on this argument, I define crime generally, and IPV specifically, as moral rule-breaking and develop SAT's position on the relationship between morality and the law.

Finally, I characterise SAT's concept of morality and specify the role ascribed to morality in guiding people's perception of moral rule-breaking as an action alternative.

2.1 Morality and the Study of Human Behaviour

> In intellectual history, questions of morality show up in the first chapter
>
> (Haidt, 2008, p. 65)

Most people have an idea or a belief about what is meant when we talk about morality, but do we all have the same notion of what morality is? It is reasonable to argue that when we talk of morality, while there may be an underlying similarity in what we are referring to, namely, what is good or bad, right or wrong, it is equally reasonable to submit that we also *differ* in what it is that we are referring to. Are we talking about moral character or moral action, or both, when we say that a person is moral or immoral? These questions have long been pondered by philosophers, psychologists, and sociologists, yet there remains no agreed upon definition of morality or moral action (see Haidt, 2008; Haidt & Joseph, 2008; Hitlin & Vaisey, 2010). However, it is generally agreed that morality or moral behaviour can pertain to "concepts like good and bad, right and wrong … and to evaluate the status of a particular action or practice in that domain" (Hitlin & Vaisey, 2010, p. 5). Yet, what is considered moral varies across cultures and throughout history (Haidt, 2008; Haidt & Joseph, 2008; Haidt, Koller, & Dias, 1993), and the role of morality in society has often evolved in response to scientific, political, and religious reform (Boutellier, 2000; Haidt, 2008).

A key example is the emergence of modern Western moral philosophy during the Age of Enlightenment, which represented an "attempt to ground morality in highly abstract, even logical truths and to disengage it (especially) from religious belief" (Haidt & Joseph, 2008, p. 369). Modern Western moral philosophy is divided into the consequentialist (e.g. utilitarian) moral philosophy, which is concerned with the *outcome* of actions (i.e. does an action yield a 'good' or 'moral' outcome?), and formalist (e.g. deontological) moral philosophy, which is concerned with the *nature* of actions (i.e. is an action 'good' or 'moral'?) irrespective of the outcome (Crockett, 2013; Haidt & Joseph, 2008). While both consequentialist and formalist schools of moral philosophy are concerned with moral action, the principles that guide whether a particular action is morally good or morally bad, are often in conflict (Greene, Sommerville, Nystrom, Darley, & Cohen, 2001). This conflict is well illustrated by moral dilemma thought experiments, such as

Foot's (2002 [1967]) ‘trolley problem’ (and its various manifestations), in which a person is faced with the dilemma of sacrificing one person to save many. The consequentialist (i.e. utilitarian) moral action would be to sacrifice one person to save the many, while formalist (deontological) moral principles would assert that such an action is immoral: one should not use another person as ‘a means to an end’ (a principle of the categorical imperative in Kantian ethics), even if such an action results in the ‘greatest good for the greatest number’ (a utilitarian principle; see Bentham (1970 [1789]).

Kantian ethics is associated with rules that guide moral behaviour (i.e. the principles of the categorical imperative, with particular consideration of the rights and duties of people [Greene, 2008; Misselbrook, 2013]). Influenced by Kantian deontological ethics, Lawrence Kohlberg developed a cognitive-developmental theory of moral development, comprised of a number of sequential levels and stages (similar to Piaget’s approach in developmental psychology; see Kohlberg, 1973), where people’s moral reasoning in response to a moral dilemma reflects their stage of moral development. Kohlberg (1973) uses the following dilemma to illustrate variation in moral reasoning:

Heinz has a wife who has a cancer that can only be (possibly) cured by a particular drug, which is very expensive. Heinz tries to procure the money by asking friends and family, but can only gather half of the required money. Heinz asks the drug producer if he can pay for the drug in instalments; the drug producer says ‘no’. Heinz steals the drug instead to try and save his wife (Summarised from Kohlberg, 1973, p. 638).

Is it wrong for Heinz to steal the drug and potentially save his wife, but in doing so break the law? Or, is it wrong for Heinz to let his wife die, but not break the law? According to Kohlberg (1973, 1974), as children and adolescents progress through the stages of moral development, they acquire an increasing awareness of justice. Justice represents an advancement from being concerned with rules to being concerned with morality: “justice is not a set of rules; it is a moral principle” (Kohlberg, 1974, p. 11). The most advanced stage of Kohlberg’s moral development theory is stage six, which draws on Kantian ‘moral rules’ and involves consideration of rights and duties, and what is fair and just, such as the wife’s right to life, and the husband’s duty to his wife (Kohlberg, 1973). Stage six takes account of the development of people’s awareness that the law is not necessarily fair and just; therefore, the law may contravene one’s personal moral rules, and in such instances it may be regarded as “right to violent such laws” (Kohlberg & Hersh, 1977, p. 57). Thus, in

Kohlberg's dilemma, at stage six "morality (justice) displaces convention" (Nucci & Turiel, 1978, p. 401); a person must decide whether Heinz should break the law and save his wife (act morally), or follow the law and let his wife die (act in accordance with convention).

Kohlberg's stage six of moral development illustrates two key points that are of importance to this thesis. First, the meaning of 'moral rules' can vary as a function of philosophical or theoretical perspective, for example, Kantian moral rules do not necessarily align with legal moral rules (i.e. normative rules of society). Therefore, 'moral rules' should be clearly defined in any theory in which morality is a central component of the framework. Second, legal rules may be discordant with a person's own moral values; the lack of correspondence between personal moral values and the law may provide an explanation for why people break the law and thus disrupt the social order (e.g. Wikström, 2010a; I return to this point later in the chapter). Nevertheless, the role of morality in the maintenance of the social (normative) order has long been a topic of social theory.

In particular, morality holds a significant place in the works of eminent sociologists such as Emile Durkheim (e.g. Durkheim, 1961 [1925]) and Talcott Parsons (e.g. Parsons, 1937a, 1937b); indeed, Hitlin and Vaisey (2010, p. 3) suggest that many early sociological theorists would consider it "unthinkable" to neglect the role of morality in our understanding of the social order. For example, Durkheim, emphasised the rule-guided nature of morality: "there is an aspect common to all behavior that we ordinarily call moral. All such behavior conforms to pre-established rules" (Durkheim, 1961 [1925], p. 23); moreover, he underscored the importance of (moral) rules and rule-following for the cultivation and maintenance of a cohesive and moral society (Durkheim, 1966 [1895], 1984 [1893]). Durkheim also incorporated the notions of justice into his characterisation of morality and moral rules: "it is not enough that there be rules: they must be just"(Durkheim, 1984 [1893], p. 338). For Durkheim, justice is the "moral norm which guides fairness" (Schoenfeld & Mestrovic, 1989, p. 124).[20]

Yet, while morality had a central role in early sociology, Hitlin and Vaisey (2010) report that sociology has been "neglecting morality for decades" (p. 3; see also Hitlin & Vaisey, 2013). Likewise, despite the attention that has been paid to morality and human behaviour throughout the centuries, Wikström (2010) notes that "Morality is rarely the main topic in criminological theory

[20] Note that "Durkheim rejected Marxist, Kantian, and utilitarian conceptualisations of justice" (Schoenfeld & Mestrovic, 1989, p. 115). Thus, in the same manner that people's understanding of 'morality' can vary, what is considered just is not consistent across scholars.

and research" (p. 211; see also further references in the next section). It is the role of morality in criminological theory to which I turn next.

2.1.1 A Brief Review of the Role of Morality in Theories of Crime

It is certainly true that references to 'morality' can be found throughout criminological theory; this is hardly surprising considering that crime denotes behaviour that violates the rules of society, and thus violates values of what is conventionally regarded as 'good' or 'right' (e.g. Hirschi, 1969). Even proponents of the rational choice perspective, who have not traditionally devoted much time to understanding or establishing the nature of criminals, note that their "original depiction of the offender was of an individual bereft of moral scruples" (Cornish & Clarke, 2008, p. 39). Furthermore, empirical research has pointed to the explanatory value that morality can bring to our understanding of crime (Brauer & Tittle, 2016; Longshore, Chang, Hsieh, & Messina, 2004; Paternoster & Simpson, 1996; Schoepfer & Piquero, 2006). Yet, it is also true that morality is seldom the *principal* explanatory variable within theories of crime (Antonaccio & Tittle, 2008; Boutellier, 2000; Silver & Abell, 2016; Tittle, 2007; Wikström, 2010a); further, where morality *is* considered, theorists vary in the role that they ascribe to morality in their explanations of crime.[21] Within this section I provide an overview of the place given to morality in some prominent criminological theories.

Normative rule-following is typically the focus of criminological and sociological research concerned with the relationship between morality and criminal behaviour (Silver & Abell, 2016). Broadly speaking, references to morality in criminological theories of crime causation point to learned attitudes and beliefs that support the use of criminal behaviour, and/or the employment of neutralisation techniques that allow individuals to override conventional moral values in order to engage in criminal behaviour. For example, the notion of assimilated criminal attitudes is concordant with subculture theories, such as Albert Cohen's (A. K. Cohen, 1956) subculture theory of delinquency, and Wolfgang and Ferracuti's (1967) subculture theory of violence. Both theories submit that subcultures generate their own rules of conduct, which are seen to be correct or moral

[21] While we do not need to agree on what is meant by morality or the role of morality in the causes of crime, if we are to compare research findings regarding the relationship between morality and crime, it would be apt to agree both on what we mean by 'crime' and what we mean by 'morality' (this argument in relation to the definition of crime in criminological theory and research was set out by Wikström and colleagues [2012, p. 7]).

by the members of the subculture.[22] For instance, A. K. Cohen (1956) writes that the code of conduct governing the behaviour of delinquent subcultures has an "unconventional moral flavor" (p. 35), while Wolfgang and Ferracuti (1967) submit that within the violent subculture, violence is not seen as wrong, but rather as acceptable and valid conduct.

Similarly, one of the concepts in Sutherland's differential association theory (e.g. Sutherland, 1947) and subsequently Akers' social learning theory (which builds upon Sutherland's theory [Akers, 1998])[23] is that of 'definitions favourable (or unfavourable) to violation of the law' (see Akers, 1998, p. 24). Within the differential association/social learning context 'definitions' are beliefs or attitudes that reflect personal moral standards of law following or breaking (Akers, 1998; Sellers, Cochran, & Branch, 2005). Accordingly, the differential association/social learning perspective is that law breaking is *more likely* in a person who has developed definitions favourable to law-breaking, namely he or she does not think it is wrong to break the law, or has a weakly held belief in following the law (Akers, 1998; Sellers et al., 2005). However, it is pertinent to recognise that within the social learning framework described by Akers (1998) 'definitions favourable to crime', while increasing the probability of criminal behaviour, are not a *necessary* part of the explanation of criminal acts. Akers (1998) also suggests that individuals break the law because of *neutralizing* definitions, which provide justification and rationalisation for law-breaking; moreover, social learning theory suggests that neutralising definitions are held by offenders more often than definitions favourable to crime (see in particular, p. 79).

The notion of neutralisation is a key component of Sykes and Matza's (1957) theory of delinquency. Sykes and Matza (1957) do not subscribe to the notion of a criminal sub-culture, or a criminal morality. For Sykes and Matza (1957) the nature of a criminal subculture suggests that members hold a morality conducive to crime, and therefore, would be unlikely to experience guilt and shame for committing criminal acts. Yet, according to Sykes and Matza (1957) "there is a good deal of evidence suggesting that many delinquents *do* experience a sense of guilt or shame" (p. 664-665;

[22] A subculture may refer to social groups that share certain values (e.g. criminal/delinquent gangs); by sharing some key values (e.g. the acceptability of violence as a method of retribution) each criminal gang, and each member of each gang, contributes to the subculture (Wolfgang & Ferracuti, 1967).

[23] Akers (1998) explains: "Sutherland proposed that criminal and delinquent behavior are learned by the same processes and involve all of the same mechanisms as conforming behavior" (p. xvi). However, Sutherland did not explain how (by which process/es) behaviour is learned; thus, Burgess and Akers (1966) revised Sutherland's theory by including social learning principles, in particular drawing on principles of operant conditioning, to create differential association-reinforcement theory, which later became social learning theory (for a detailed description of the evolution of social learning theory, see Akers, 1998).

emphasis in original),[24] moreover, they contend that offenders often endorse the "moral validity" of the social and legal order, and suggest it unlikely that offenders fully reject conformity to the social order (Sykes and Matza, 1957, p. 665). Rather, for Sykes and Matza (1957), individuals are able to commit acts of crime by engaging in 'techniques of neutralisation': justifications or rationalisations that occur before committing an act of crime.[25, 26] Thus, for Sykes and Matza (1957) a criminal morality does not propel people to become delinquent, rather, delinquents must learn techniques to suspend or 'neutralise' their conventional morality in order to offend.[27] However, the reason *why* individuals may seek to neutralise their morality, namely why a person perceives law-breaking as an action alternative that needs to be neutralised in the first place, is not fully explicated.

An alternative to learned definitions favourable to crime and the use of neutralisation techniques, is the reference to morality and moral behaviour found in Hirschi's control theory of delinquency (Hirschi, 1969). Specifically, Hirschi (1969) departs from the moral neutralisation approach, and asserts that a person does not need to suspend his or her moral belief system in order to break the law. Rather, Hirschi's (1969) emphasis is on individuals' belief in the morality of the social order, rather than in individual morality. Therefore, for Hirschi (1969), conventional social bonds to institutions such as school, work, and the family should be the *main* focus in explanations for why people do not commit acts of crime, rather than moral values. Further, the view of Hirschi's control theory is not that criminals have a morality that supports crime, but rather "they are amoral. As such, their beliefs do not *prevent* them from engaging in crime" (Agnew, 1995, p. 369; emphasis in original). Indeed, I suggest that control theories regard morality (or virtue) as a product of successful controls and/or lack of opportunity to break the law, rather than a feature of a person's

[24] Although Sykes and Matza (1957) do not provide references to evidence this assertion.

[25] Sykes and Matza (1957) saw their notion of techniques of neutralisation as compatible with Sutherland's differential association theory. Regarding moral neutralisation, see also the socio-cognitive work of Bandura regarding moral disengagement (e.g. Bandura, 1999).

[26] Similarly, Cressey (1953) reports that in his study of 'financial trust violators' (i.e. people who had been convicted of fraud and/or embezzlement), offenders typically provided rationalisations or justifications for their criminal behaviour that allowed them to maintain their moral sense of self. In particular, the rationalisations used by the offenders provided a way to psychologically distance themselves from being a 'real criminal', for example: "The assumption is that only those trust violators who were not 'merely borrowing,' or who were 'spending the money foolishly' had criminal intent and are *real* criminals" (Cressey, 1953, p. 141, emphasis in original).

[27] Similarly, Dobash and Dobash (1998) suggest that male IPV perpetrators suspend or neutralise any social norms that prohibit violence against women. Within the field of moral psychology, a small body of IPV research has focused on the preservation of 'moral identity' in IPV perpetrators via psychological mechanisms (i.e. processes of self-deception) to protect the self-concept of being a moral person (Vecina, Chacon, & Perez-Viejo, 2016; Vecina, Marzana, & Paruzel-Czachura, 2015; Vecina & Marzana, 2016), which links with notions of neutralisation and definitions in criminological theory.

character that helps us to understand why individuals see crime as an option in the first place (see further, Section 2.5 of this chapter).

From this brief showcase of how some criminological theories have made references to morality, it is clear that morality, while a consideration, often plays a supporting rather than a leading role in explanations of crime. Tittle (2007) summarises the role of morality in criminological theory well when he writes: "For most theorizing in criminology, morality is bundled with other notions, such as social bonds, and is simply one of many products of learning, or is treated as a contingency for the operation of other variables" (p. 485).

SAT regards morality as being central to understanding criminal behaviour (Wikström, 2006, 2010a; Wikström et al., 2012). The key arguments made by SAT regarding morality and crime are: first, acts of crime are acts that break formal moral rules of conduct; second, people's morality is comprised of personal moral rules and moral emotions; and third, crime occurs when a person's morality guides him or her to perceive crime (moral rule-breaking) as an action alternative (Wikström, 2010a; Wikström et al., 2012). In Sections 2.3 – 2.5, I will develop these arguments in detail, but first I consider the foundation of the SAT framework: the rule-guided nature of human action.

2.2 Humans are Rule-Guided Actors

> Situational Action Theory is based on explicit assumptions about human nature and its relation to social order. Humans are viewed as essentially rule-guided actors and social order as fundamentally based on adherence to common rules of conduct
>
> (Wikström & Treiber, 2009, p. 77)

Rules of conduct, although varying in their content, have existed throughout human history, and as such, rules can be established as being "*universal"* in human society (Goode, 2015, p. 276; emphasis in original). Furthermore, Goode (2015) suggests that "rules are, in all likelihood, the cornerstone of human survival" (p. 276). It follows that to understand human beings as rule-guided may seem the logical starting point of criminological theories of the causes of crime. Yet, the

assumption that human behaviour is rule-guided rather than driven by self-interest sets SAT apart from many prominent theories of human behaviour generally (see e.g. Baumeister & Alghamdi, 2015), and criminal behaviour more specifically (see Agnew, 2014; Wikström & Treiber, 2016).

Within criminology, the assumption of a self-interested human nature undergirds many theories of crime. For example, Gottfredson and Hirschi's (1990) self-control theory of crime is influenced by Jeremy Bentham's 'Principle of Utility', which contends that: "Nature has placed mankind under the governance of two sovereign masters, *pain* and *pleasure*" (Bentham, 1970 [1789], p. 11, emphasis in original). Correspondingly, Gottfredson and Hirschi (1990) submit that acts of crime (defined as acts of force or fraud) are "undertaken in the pursuit of self-interest" (p. 15). For Gottfredson and Hirschi (1990) human self-interest is a fundamental assumption of human nature and forms the key motivation for committing an act of force of fraud (i.e. crime).[28] According to self-control theory, acts of crime provide an immediate source of pleasure, they are "short-lived, immediately gratifying, easy, simple, and exciting" (Gottfredson & Hirschi, 1990, p. 14). However, the pleasure gained from acts of crime can be followed by significant pains, such as the pains of a lengthy prison sentence, "it follows that those pursuing such behaviors may tend to have something in common, something that causes them to choose short-term advantage over long-term cost" (Hirschi & Gottfredson, 1990, p. 425). For self-control theory, the 'something' is low self-control and the inability to accurately calculate, or insensitivity to, the pains of crime (Gottfredson & Hirschi, 1990, see p. 95).

Similarly, the rational choice perspective of crime advanced by Cornish and Clarke (e.g. Clarke & Cornish, 1985; Cornish & Clarke, 2008) submits that acts of crime are purposeful actions that people decide upon, via a process of cost-benefit analysis, in order to satisfy a particular desire.[29] Moreover, elements of a rational choice perspective, namely the calculation of anticipated costs

[28] The definition of crime used by Gottfredson and Hirschi (1990) has been criticised by Wikström and Treiber (2007). However, my purpose here is not to critique self-control theory, but to illustrate the prevalence of the 'humans are self-interested' assumption in criminological theories. For a further critique of some of the assumptions of self-control theory see Tittle (2011) and Wikström and Treiber (2007).

[29] It should be noted that the rational choice perspective of crime diverges from economic theories of rational choice (Clarke & Felson, 2008; Cornish & Clarke, 2008). Economic models of rational choice are based on 'perfect rationality' whereby a person is able to make a decision based on a knowledge of all possible costs and benefits (Cornish & Clarke, 2008; Wikström & Treiber, 2016). By contrast, the rational choice perspective of crime is based on what Simon (e.g. Simon, 1990) has referred to as 'bounded rationality', which acknowledges that human decision-making ability is constrained by individual decision-making capacities and outside influences (Cornish & Clarke, 2008). Similarly, M. Felson (2012) clarifies that 'rational' within the context of the rational choice perspective does not (necessarily) correspond with a considered thought-processes by the would-be offender: "the offender considers a few things… The offender thinks, but not too much" (M. Felson, 2012, p. 206).

and rewards of behaviour, underlie Aker's social learning theory of crime; indeed Akers (1990) has argued that rational choice theory is "subsumable under the more general differential reinforcement formula in social learning theory" (p. 655). Likewise, routine activity theory (L. E. Cohen & Felson, 1979; M. Felson & Cohen, 1980) incorporates the notion of rationality, but to a less "explicit" extent than the rational choice perspective (Clarke & Felson, 2008, p. 9). For example, Marcus Felson and Lawrence Cohen (1980, p. 392) write: "Although we recognize that some crimes may be irrational events, we believe that the vast majority of direct-contact predatory violations are rational acts in which people clearly gain and lose sustenance" (whereby the offender gains something and the victim loses something).[30]

By contrast, SAT submits that human actions are predominantly rule-guided and that the social order can be understood to be based on a system of rules (Wikström & Treiber, 2009, 2016). Similarly, Ehrlich (2002 [1936]) observed, "Just as we find the ordered community wherever we follow its traces … so we also find the law everywhere, ordering and upholding every human association" (p. 25).[31] It follows that the propensity to develop a system of rules to keep order in society can be posited to be "somehow related to *human nature*" (Wikström, 2010, p. 219, emphasis in original).[32] Thus, the human inclination to follow rules is compatible with the rule-based organisation of human society, while the view of humans as predominantly self-interested conflicts with our rule-based social order, as Wikström and Treiber (2016) ask: "why would we create a social structure at odds with our nature?" (p. 435).

However, this does not mean that SAT denies the role that self-interest may play in guiding human action (Wikström & Treiber, 2016). Rather, SAT submits that people are driven by self-interest *within the bounds* of their personal rules of conduct, namely the extent to which the self-interested action is in line with their personal rules of what is right or wrong (Wikström & Treiber, 2016).

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[30] The rational choice and routine activity perspectives are 'opportunity' theories rather than control theories, yet, as Goode (2015) notes: "a theory that focuses on opportunity is consistent with self-control theory" (p. 288), namely, there must be an opportunity in which low self-control leads to crime (Gottfredson & Hirschi, 1990). Furthermore, both the rational choice and routine activity perspectives address the role of external controls in the prevention of crime. For example, see Cornish (1994) and Cornish & Clarke (2002) regarding rational choice and situational crime prevention. For routine activity theory, one of the key requirements for an act of crime to take place is "the absence of capable guardians against a violation" (Cohen & Felson, 1979, p. 589), thus, the presence of a 'capable guardian' can be regarded as a form of deterrent/ external control (see M. Felson, 1997). Hirschi and Gottfredson (1990) are also noted for having identified rational choice theory and routine activity theory as 'restraint' theories.

[31] Ehrlich's (2002 [1936]) use of the word 'association' is translated from the German 'Genossenschaften' which means a 'cooperative' or a 'social group'.

[32] Neuroscientific evidence also supports the argument regarding the rule-guided nature of human actions, see for example, an overview of the literature by S. A. Bunge (2004), and for an edited volume of research literature see S. A. Bunge and Wallis (2008).

Therefore, a person may see and choose to carry out an action that is beneficial to him or her, but the process is guided by rules, not self-interest (Wikström & Treiber, 2016). Hence, self-interested actions are still fundamentally rule-guided.

2.3 Defining Crime as Acts of Moral Rule-Breaking

> we can say that morality consists of a system of rules of action that predetermine conduct. They state how one must act in given situations
>
> (Durkheim, 1961 [1925], p. 24)

In accordance with the assumption that human beings are 'rule-guided actors', SAT submits that human behaviour "is guided by rules of conduct about what is right and wrong to do (or not do) in particular circumstances" (Wikström & Treiber, 2013, p. 322). SAT defines rules of conduct as moral rules; moral rules can be informal rules guiding socially appropriate behaviour, such as social etiquette, and they can be formal rules, such as rules of law (Wikström, 2010a, 2014; Wikström & Treiber, 2009). The law is a system of rules, and in the case of criminal law, it is a system of prescriptive rules of human conduct to which people are expected to conform (e.g. H. L. A. Hart, 1994).[33] Therefore, "What defines acts of crime is thus not that they are particular types of actions but that they are *actions that breach rules of conduct* (defined in law)" (Wikström, 2010, p. 217; emphasis in original).[34] Acts of theft, acts of illegal downloading, acts of rape, and acts of violence against an intimate partner are all qualitatively different actions, however, they are all acts of formal moral rule-breaking (in most jurisdictions). SAT is concerned with explaining why people break the rules of law governing particular behaviours, not with explaining the behaviours themselves

[33] Situating the law as a set of rules, the jurisprudence scholar, H. L. A. Hart (1994), sets out a number of questions, such as "What are rules? What does it mean to say that a rule exists? Do courts really apply rules or merely pretend to do so?" (p. 8). Furthermore, there are rules that underlie the law: There are rules of judicial process and rules of how judges should come to a decision on punishment. Law is not just the following of laws, it is how laws are understood, how the laws are enforced and so on (H. L. A. Hart, 1994). However, these are questions for legal philosophers, and will not be addressed further within this thesis.

[34] While criminologists tend to recognise that acts of crime break rules (e.g. Matza, 1964), this element of crime is typically absent from criminological definitions of crime, the analytical focus of these criminological theories is not why people break rules, but why people engage in particular types of behaviour such as 'acts of force or fraud' as per Gottfredson and Hirschi (1990).

(Wikström et al., 2012).[35] For example, SAT addresses why a person would hit his or her intimate partner when it is against the law to do so, rather than explaining the act of hitting a partner in and of itself. Why people break the (moral) rules is the focus of the SAT framework.[36]

2.3.1 Moral Rules and Moral Norms: A Framework for Appropriate Conduct

> the rule is, like the bulk of the criminal law, meant to be taken seriously as a standard of behaviour
>
> (H. L. A. Hart, 1994, p. 39)

The law is commonly conceived of as system of formal social control (e.g. Fuller, 1969; Tyler, 1990), and social control can be defined as "the capacity of a society to regulate itself according to desired principles and values" (Janowitz, 1975, p. 82).[37] As noted, SAT is concerned with explaining why people engage in a behaviour when they know that the behaviour in that particular circumstance breaks the rules, and thus compromises the social order (Wikström, 2006, 2010a). It follows that a person must know what the rules of conduct are in order to intentionally break the rules. To this point, SAT is not intended to explain accidents or actions that unintentionally break the law (Bouhana & Wikström, 2010; Wikström, 2010a; Wikström & Treiber, 2009).[38] Moreover, it is largely accepted that it is unrealistic for individuals to have a full knowledge of the expansive set of rules that make up the law of a given jurisdiction (see for example, Ehrlich, 2002 [1936], p. 12, 19-20). It has long been recognised that the rules of law are understood and abided by via norms of acceptable and unacceptable behaviour, and thus norms, rather than laws, guide human behaviour (Ehrlich, 2002 [1936]). Fuller (1969) refers to this concept as the 'generality' of law: the

[35] SAT is designed to explain moral *actions*, and is thus only applicable to explain acts of crime, not the criminalisation of attributes or thoughts which may be designated as rule-breakings (see Wikström, 2014, p. 77, footnote 3).
[36] SAT is careful to state that its characterisation of crime as moral action does not translate to moral relativism (see Wikström et al., 2012, p. 13-14; Wikström, 2010a, p. 218-219).
[37] Equally, Goode (2015) writes that "… sociologists and criminologists define *social control* as the efforts of members of collectives to induce others to act in a socially approved manner and to refrain from acting in a disapproved manner" (p. 275; emphasis in original).
[38] Similarly, Matza (1964) described delinquency as "rule-breaking behavior performed by juveniles aware that they are violating the law" (p. 182).

law does not provide a specific recipe for how to behave, but "provides a framework for the citizen within which to live his own life" (p. 24).

SAT submits that moral rules (or laws) are only moral norms "if they are shared among people in a jurisdiction (or people in a particular setting)" (Wikström, 2014, p. 76). People are not unquestioning of the law, and do not necessarily accept and agree with all laws;[39] thus, some laws are more normative than others, and the more widely accepted and enforced are the laws, the less likely people are to break them (see Wikström & Treiber, 2009, p. 93; Wikström, 2010b; Wikström, 2014). For example, while social norms traditionally turned a blind eye to men's violence against female partners (Dobash & Dobash, 1992; Hotaling & Straus, 1980; Straus, 1976, 2009), the more people accept that violence against a partner is a breach of the criminal law, the more likely individuals are to regard violence against a partner as wrong and to abide by the law prohibiting such violence.

2.3.2 Establishing Intimate Partner Violence as Moral Rule-Breaking

SAT is a general theory of crime (Wikström et al., 2012), and as such, it should be possible to explain all acts of moral rule-breaking within the SAT framework. Accordingly, as a form of behaviour that is no longer considered a private issue, but one that breaks both informal and formal rules of conduct (see Chapter 1), it is appropriate to analyse IPV within SAT's framework of moral rule-breaking. Within the IPV literature, brief references can be found to "the intrinsic moral wrong of assaulting a partner" (Straus, 1999, p. 21) and the social norm violation that violence against women represents (Dobash & Dobash, 1998).[40] As with theories of crime, it appears to be taken as understood that acts of IPV violate contemporary moral norms of egalitarian societies. Yet, there is a paucity of IPV theory and research that analyses acts of IPV as acts of moral rule-breaking.

Wikström and Treiber (2009) have previously argued that "*all* acts of violence can be explained within the general framework of a theory of moral action" (p. 76, emphasis in original), because they are ultimately guided by moral rules (formal or informal) denoting when and under what

[39] Likewise, H. L. A. Hart (1958), asserted that it is important to not only consider the prescriptive nature of the rules of law (including the laws/rules about how laws are made), but also to consider "what it is for a social group and its officials to accept such rules" (p. 603).

[40] However, Dobash and Dobash (1998) contend that holding personal moral rules that excuse violence against a female partner is in line with the undertones of patriarchy that have "still not been completely eradicated from society and underlies the tendency of some to 'turn a blind eye'" (p. 163).

circumstances such an action is sanctioned or prohibited. Violence in some circumstances is permissible, for example, the violence of soldiers in battle and the violence used in certain sports; yet such violence is still rule-guided (Wikström & Treiber, 2009).[41] As Wikström and Treiber (2009) illustrate:

> …the use of violence in a boxing ring is permitted *if* boxing is legal, *if* the person hitting is a boxer, *if* the person being hit is his opponent, *if* that opponent is wearing the right equipment, *if* the referee has indicated the match is underway, and so forth. What is common to all cases of violence is the fact that there are *always* moral rules guiding its use (p. 79, emphasis in original).

Violence within intimate relationships is quite clearly an example of behaviour that is rule-guided; in Chapter 1, I demonstrated how IPV has become increasingly recognised as a behaviour that breaks informal rules of social conduct and formal rules of criminal law, and should not be ignored and relegated to 'a private matter'. However, to understand IPV as rule-guided behaviour we need to consider the definition of violence as moral rule-guided action more closely.

Within the context of moral rule-breaking, acts of violence are acts "*intended to bring about physical harm to another being*" when it is against the rules (formal or informal) to do so (Wikström & Treiber, 2009, p. 78, emphasis in original).[42] The definition of violence used within the context of the SAT framework considers only intended acts of harm: to explain violence as moral rule-guided action means to explain why a person intends to physically harm someone when it is wrong (against the rules) to do so (Wikström & Treiber, 2009). Therefore, as a class of moral rule-breaking action, IPV can be defined as actions that are intended to bring about physical harm to an intimate partner when it is against the rules (law) to do so.

While Wikström and Treiber (2009) consider intent important in their definition of violence (and rule-breaking action moral generally), it is not necessary to include the consequences (i.e. the 'success') of the violent action in the definition of violence as moral rule-breaking. For example, to throw a heavy object at one's partner with the intent of causing harm to him or her would be classed as a moral rule-breaking action, irrespective of whether one is successful in causing the intended harm. Of course, the injury caused to the victim is not insignificant, and may influence

[41] Defining physical violence is made a complex task when one considers the many forms and functions of violence, the contexts in which violence takes place, as well as the varying legitimacy of violent actions (e.g. Bandura, 1973, 1983; Collins, 2008; Geen, 2001; Wikström & Treiber, 2009).

[42] The focus of this thesis is physical acts of aggression, which is reflected in the definition of IPV as moral-rule-breaking used in this thesis. However, SAT can also explain aggression more generally; Wikström and Treiber (2009) include violence as a "subclass of a more inclusive concept of *aggression"* (p. 78, emphasis in original).

how serious the rule-breaking is perceived to be, and the punishment imposed (where the behaviour is detected). Within the IPV literature, the physical and psychological consequences of violence have been important points of discussion in the 'gender debate' (for overviews see, Kimmel, 2002; Straus, 1999). Yet, it is not necessary to account for the consequences of violence when defining and explaining IPV within a framework of moral rule-breaking, because the focus is on the *rule-breaking* that is reflected by the action, not the consequences of the action.[43]

2.4 Delineating Situational Action Theory's Position on The Relationship Between Morality and The Law

> Our attempt to avoid value judgements and to take a scientific stance should not be construed to indicate that we lack compassion for victims of violent crimes
>
> (Tedeschi & Felson, 1994, p. xii)

The topic of morality, and the relationship between morality and the law is rife with conceptual ambiguity and confusion (Heimer, 2010; Hitlin & Vaisey, 2010), further, "morality is a word with strong connotations" (Wikström, 2010, p. 218). Perhaps then, it is not surprising that SAT's characterisation of acts of crime as acts of moral rule-breaking has been met with some misunderstanding. For example, in a footnote, Thome (2010) asserts that SAT's definition of crime as acts of moral rule-breaking defined by law "is a somewhat problematic mingling of analytical concepts that should be kept distinct" (p. 124). Accordingly, as a key feature of the SAT framework, it is important to clarify SAT's position on the relationship between morality and the law.

[43] There is agreement that violence represents an extreme form of aggression (Berkowitz, 1993; Wikström & Treiber, 2009), but a consensus is lacking on how aggression, and thus violence, should be defined. For example, Berkowitz (1993) includes psychological harm in his characterisation of aggression, describing aggression as "any form of behavior that is intended to injure someone physically or psychologically" (p. 3). Other definitions integrate the motivation of the recipient of the violence, for example R. A. Baron and Richardson (1994) define aggression as "any form of behavior directed toward the goal of harming or injuring another living being who is motivated to avoid such treatment" (p. 7, emphasis in original; for a similar definition see Geen 2001, p. 3). Therefore, it is acknowledged that the definition of violence within this thesis may be rejected by some readers. Nevertheless, it should be borne in mind that the definition of violence adopted within this thesis is in line with analysing IPV as moral rule-breaking.

SAT defines acts of crime as acts of moral rule-breaking, and ascribes an important role to personal morality in the explanation of crime (see Section 2.5), yet SAT is not a "moralistic" theory of crime (Wikström, 2010, p. 218). Nor is SAT a theory of jurisprudence: it does not seek to justify or to give an explanation for the content of the law, the morality of the law, or how or why particular laws have come to be (Wikström, 2006; Wikström et al., 2012).

For SAT to define acts of crime as acts that break the formal moral rules of a given jurisdiction does not necessitate SAT to take a position on the virtue of the moral rules that make up the law (Wikström et al., 2012). Moral rules may be just and fair, or they may be unjust and unfair - such as in the case of despotic regimes. Indeed, the perceived immorality or unfair nature of the law is undoubtedly part of the explanation for why some people break the law and/or the reason that some laws are changed (such as laws regarding marital rape, homosexual acts, and gender and race equality) (Wikström, 2010a, 2017). By contrast, some people may follow the rules even if they disagree with them, because their morality dictates that following the rules in itself is the right thing to do.

The focus of SAT is on whether or not the individual follows or breaks the rules, irrespective of the moral virtue of the rules (Wikström, 2014, 2017; Wikström et al., 2012). This is not to say that the morality of the law is not important, nor is it to say that moral virtue and rule-following must, necessarily, be analysed separately; rather rules of conduct do not have to be 'good' or 'just' (Wikström, 2010a; Wikström et al., 2012). By defining acts of crime as acts that break formal moral rules does not require SAT to take a position on whether individuals are immoral or virtuous as a result of their actions or inactions (Wikström, 2006, 2010a, 2017). However, its focus on the rule-breaking nature of actions, and refrainment from moralistic judgement, does not mean that SAT is dismissive of the harmful and unscrupulous consequences that can result from moral rule-breaking actions.

Influenced by the work of John Austin and Jeremy Bentham, the legal positivist tradition also makes the distinction between the rules of law and morality (e.g. H. L. A. Hart, 1958, 1994; Kramer, 2003). Legal positivism distinguishes between the law as it ought to be and the law as it is; what is law and what is moral are not necessarily one and the same, and in some instances there are laws that are considered (by some at least) to be "morally bad" (H. L. A. Hart, 1958, p. x; see

also, Boutellier, 2000).[44] The argument, therefore, is that the law is not inherently moral; yet, while morality and law can be in opposition, they are not always and necessarily so (Kramer, 2003; see also H. L. A. Hart, 1994, p. 185; for an overview of the issues and debates regarding the morality-law relationship see Heimer, 2010).[45]

Sometimes following the rules does not lead to the most just or good outcome, while breaking the rules can be perceived, in particular circumstances, to be the good or just thing to do (for example, stealing medicine to help a sick wife, as in the example of Heinz's dilemma in Section 2.1 of this chapter). Moreover, what is considered to be just or morally good, and the content of rules that guide acceptable behaviour, varies between legal systems, between cultures, as well as across historical time periods (Goode, 2015; Haidt et al., 1993; Larcom, 2014; Phillipson, 1971; Wikström et al., 2012), leading Phillipson (1971) to argue that "there is no behaviour which is always and everywhere criminal" (p. 5). Homosexual acts and acts of marital rape are often cited as examples of behaviours that have varied, and continue to vary, in their criminal status across jurisdictions (both within and between countries), as well as throughout history (see Bouhana & Wikström, 2010; McGuire, 2004; Wikström et al., 2012). The behaviour remains the same, yet the *rules* prescribing whether the behaviour is criminal vary. Therefore, separating rules of conduct from moralistic judgements, provides a way to define and analyse crime that transcends jurisdictional boundaries and historical time periods (Wikström, 2010a; Wikström et al., 2012).

Within this section I have delineated SAT's concept of moral action; in the following section, I turn to the nature and role of personal morality in SAT's explanation of crime.

[44] Some laws are held to be morally wrong by some people, and morally right by others; likewise, some laws are seen to be supportive of the rights of some individuals while concurrently violating the rights of others. A salient and highly contentious example is that of the law, and the morality of the law, governing abortion. If the law says that under certain circumstances an abortion may be carried out by a medical professional, a woman who has an abortion and the medical professional who carries out the abortion (within the bounds of the rules governing the circumstances that allow abortion), are not breaking the law. The law in this case is supportive of a woman's right to choose to have a baby or not. In this case the woman may see the law as good. However, the 'pro-life' position regards abortion as morally wrong. In this case, those who argue the 'pro-life' position do not see a law that allows abortion as morally good because it is seen as violating the rights of the unborn foetus.

[45] Some legal scholars severely criticise the legal positivist argument that the law is not necessarily moral, arguing instead that legal systems that are not moral are not true legal systems (see for example, Fuller, 1958, p. 644-645, 650, regarding "internal morality of law").

2.5 Perception and Constraint: Two Divergent Views on the Nature of Morality

> Are we good because we are *good* or only good because we are *watched*?
>
> (Willer, Feinberg, Irwin, Schultz, & Simpson, 2010, p. 315, emphasis in original)

Many theories of crime posit the driving force of criminal behaviour to be self-interest (see Section 2.2). Such theories also emphasise the necessity of external and/or internal controls to constrain the natural human inclination to engage in crime (Britt & Rocque, 2016; Gottfredson & Hirschi, 1990; Hirschi, 1969; Hirschi & Gottfredson, 1990). Hirschi (1969) famously stated that (when seeking to understand why people commit acts of crime), "The question is, 'Why don't we do it?' There is much evidence that we would if we dared" (p. 34). However, this assumption of control theories has been questioned. For example, Goode (2015) suggests that control theories "take for granted the allure of deviance, crime, and delinquency" (p. 284), while Wikström has repeatedly questioned the assumption that "we would if we dared", arguing that we are not all equally motivated to commit crime, nor do we all have the same propensity to commit crime (Wikström, 2006, 2010a; Wikström et al., 2012).

Morality has traditionally been posited as the force that keeps the self-interested nature of human beings at bay: "virtue represents the use of self-control to overcome the impulses and appetites of the self" (Baumeister and Exline, 1999, p. 1167). Viewed as self-interested yet social beings, it is assumed that humans require moral rules to ensure the success of the social group: in order to be moral, humans must resist the natural instinct to be self-interested (Baumeister & Alghamdi, 2015; Baumeister & Exline, 1999; Cushman, 2015; Haidt, 2008). From this perspective, self-control is a proxy of morality. Alternatively, for SAT, morality is a construct that guides perception of (moral) behavioural options (Wikström, 2006), not the product, or the measure, of internal and/or external controls. To knowingly break a moral rule (i.e. to commit a crime) one must first see moral rule-breaking behaviour as an action alternative (Wikström, 2006, 2010a).

Yet, Britt and Rocque (2016) recently argued that SAT (and the role SAT places on morality) is in line with the assumptions of control theories of crime, stating that SAT's "main proponents have

tried to characterize it [SAT] as something other than a control theory, even though its foundation comes from decades of findings supportive of control theory" (p. 194). Moreover, Britt and Rocque (2016) equate morality with an internal source of control "that inhibits criminal acts from being committed" (p. 185). These assertions indicate a misreading of SAT, and in particular, a misreading of the role of morality in SAT.

First, SAT is not a control theory. SAT's key assumption regarding the rule-guided nature of human action is fundamentally different to the assumption of human self-interest that underlies the suppositions of control theories (as set out in Section 2.2). Further, within SAT, morality does not inhibit crime, it guides people's perception of crime as an action alternative (Wikström, 2006). The word 'inhibit' is synonymous with 'constraint', therefore, to say that morality inhibits crime suggests that it works to constrain the inclination towards crime. However, for SAT, morality is (part of) what determines a person's inclination towards crime, not what controls (constrains) it. Before considering how people make choices about behaviour, or how they may constrain themselves from engaging in rule-breaking behaviour, it is logical to first examine "*why* individuals see certain (and not other) action alternatives in the first place" (Wikström, 2006, p. 81, emphasis in original). For SAT, morality is the key to answering this question.

2.5.1 The Two Element of Morality: Moral Rules and Moral Emotions

2.5.1.1 Moral Rules

SAT posits that individuals hold a set of personal moral rules that guide perception of rule-breaking (or rule-following) as a behavioural response to a particular motivating force (i.e. provocation or temptation; Wikström, 2006; Wikström et al., 2012; regarding motivation, see Chapter 4). Individual moral rules refer to how right or wrong a person thinks it is to follow particular rules of conduct (Wikström et al., 2012). Breaches of rules of conduct can refer to minor infractions such as telling a lie, or major infractions such as robbery (see Wikström et al., 2012, p. 134-135). People vary in their propensity to be rule-following, and the extent to which people consider it wrong to break both informal and formal rules of conduct is indicative of their rule-following (or rule-breaking) propensity (Wikström et al., 2012). Thus, according to SAT, people with a weak propensity to follow rules are more likely to perceive crime as an action alternative. Indeed, research evidence using the theoretical framework of SAT, and utilising measures of moral rules compatible with SAT's definition of moral rules, have consistently found that weak personal moral

rules is predictive of higher crime involvement (Pauwels, Weerman, Bruinsma, & Bernasco, 2011; Svensson, 2015; Svensson, Pauwels, & Weerman, 2010).

Although SAT contends that a general propensity to break rules can provide a proxy for how individuals typically respond to criminogenic contexts (Wikström et al., 2012), SAT also submits that individuals hold 'action-specific' moral rules about how wrong (or not wrong) they perceive certain types of behaviours to be (Wikström, 2010a; Wikström et al., 2012).[46] For instance, a person may be generally rule-following, but consider certain rule-breaking behaviours to be acceptable. Thus, when analysing what moves a person to commit an act of violence, for example, we need to consider his or her violence-relevant moral rules; ultimately, a person's violence-relevant moral rules will guide his or her perception of violence as an action alternative (Wikström & Treiber, 2009). Likewise, it is sensible to posit that individuals have moral rules specific to particular forms of violence, such as IPV, which will provide the same function in the perception of action alternatives (Wikström, 2010a).

The construct of personal moral rules in SAT may be conceptually compatible with the concept of attitudes. While the exact definition of attitudes can vary, Ajzen and Fishbein (2000) report that it is generally accepted that attitudes denote a process of evaluation, and define an attitude to "refer to the *evaluation* of an object, concept, or behavior along a dimension of favor or disfavor, good or bad, like or dislike" (p. 3, emphasis in original). Within the IPV literature, much research has included a variable of 'positive attitudes towards partner violence' or similar, and it has generally been found that holding attitudes that condone violence against a partner is associated with IPV perpetration (e.g. Capaldi, Knoble, Shortt, & Kim, 2012; Herrero, Rodriguez, & Torres, 2016; Holtzworth-Munroe, Bates, Smutzler, & Sandin, 1997; O'Hearn & Margolin, 2000; Schumacher, Feldbau-Kohn, Smith Slep, & Heyman, 2001; Stith & Farley, 1993; Stith, Smith, Penn, Ward, & Tritt, 2004). However, the construct of 'violent attitudes' is often included as a variable that predicts IPV perpetration, rather than part of a framework that specifies the *mechanism/s* (i.e. the process/es) by which the attitudes *cause* a person to perpetrate IPV. By contrast, SAT specifies the important role of personal moral rules (e.g. IPV moral rules) in the *perception* of action alternatives (e.g. violent actions).

[46] Bouhana and Wikström (2010) have applied SAT to the explanation of terrorism. Similarly, Schils and Pauwels (2016) applied the SAT framework to an empirical study of political violence, and used a measure of 'violent extremist moral beliefs' (although the scale used was not congruent with the operationalisation of moral rules employed by SAT').

2.5.1.2 Moral Emotions

In addition to personal moral rules of conduct, SAT submits that a person's tendency to follow moral rules is influenced by the anticipatory moral emotions associated with moral rule-breaking (Wikström et al., 2012). It is widely considered that moral emotions are significant to our understanding of moral (rule-following) behaviour, in particular, they "may be critically important in understanding people's adherence to their moral standards" (Tangney, Stuewig, & Mashek, 2007, p. 347; see also Baumeister, Stillwell, & Heatherton, 1994; Sheikh & Janoff-Bulman, 2010a, 2010b). Moral emotions are considered "self-conscious emotions" meaning that they promote introspection (Tangney, Stuewig, & Mashek, 2007, p. 347; see also e.g. Eisenberg, 2005; Fischer & Tangney, 1995).

SAT incorporates two moral emotions, guilt and shame, in its construct of morality (Trivedi-Bateman, 2014; Wikström et al., 2012). Guilt and shame are two distinct moral emotions, yet the two terms are often conflated (see also, Dearing, Stuewig, & Tangney, 2005; Tangney, 1991, 1995), particularly in criminology (see also, Svensson, Weerman, Pauwels, Bruinsma, & Bernasco, 2013; Tibbetts, 1997, 2003; Trivedi-Bateman, 2014).[47] The key distinction between guilt and shame is that guilt is a negative emotion about an action, while shame is a negative emotion about the self (Dearing et al., 2005; Tangney, Stuewig, & Martinez, 2014; Tangney, Stuewig, et al., 2007; Tangney, Wagner, & Gramzow, 1992).

Guilt is a private emotion that occurs when a person carries out a behaviour that violates moral rules of society (i.e. norms of behaviour), while shame is a public emotion that a person experiences when they engage in a behaviour that violates their personal moral rules *and* wider moral rules of society (Svensson et al., 2013; see also, Smith, Webster, Parrott, & Eyre, 2002; Tangney, 1992; Tangney, Stuewig, et al., 2007). To explicate this distinction, a person who hits his or her partner may feel guilt, which would be reflected by feelings such as "I shouldn't have done that, I've really upset my partner"; while shame would be reflected by feelings such as "I'm a terrible person" or "if anyone finds out about this, they will think I'm such a bad person." [48] Thus, shame represents

[47] See for example, the study by Grasmick and Bursik (1990) in which the construct of shame was measured by asking participants "would you feel guilty if you…" (p. 845). Furthermore, Grasmick and Bursik (1990) state: "We are treating the terms 'shame' and 'guilt feelings' as interchangeable" (footnote 3, p. 845).

[48] Dobash and Dobash (1998) observed that male IPV perpetrators typically expressed low levels of shame for their behaviour.

real or anticipated "public exposure and disapproval" (Tangney et al., 2007, p. 348), and evokes negative feelings about the self, while guilt is a more private concern with one's behaviour (Tangney et al., 2007; Wikström et al., 2012). Consequently, shame is commonly considered to be a far more painful and harmful emotion than guilt (Dearing et al., 2005; Tangney, 1991; Tangney, Stuewig, et al., 2007).

Research evidence also points to the differential influence of experienced versus anticipated guilt and shame on behaviour. In particular, a tendency to experience shame (shame-proneness) can encourage maladaptive and criminal behaviour (e.g. Dearing et al., 2005; Tangney, Mashek, & Stuewig, 2007; Tibbetts, 1997, 2003), while anticipated guilt and/or shame has been found to have an inhibitory effect on such behaviour (Grasmick & Bursik, 1990; Grasmick, Bursik, & Kinsey, 1991; Nagin & Paternoster, 1993; Olthof, 2012; Rebellon, Piquero, Piquero, & Tibbetts, 2010; Svensson et al., 2013; Tibbetts, 1997, 2003; Wikström & Svensson, 2008).

Much of the research on the role of anticipated moral emotions on criminal behaviour has examined this relationship from the vantagepoint of rational choice or control theories, situating moral emotions as a factor relevant in the *decision* to offend (e.g. Grasmick & Bursik, 1990; Nagin & Paternoster, 1993; for a theoretical paper see Wortley, 1996). By contrast, as part of the construct of morality, moral emotions in SAT are relevant to the perception of crime as an action alternative, before decision-making becomes relevant (Wikström et al., 2012). SAT asserts that individuals hold anticipatory moral emotions about rule-breaking behaviour (Treiber, 2014). If a person thinks it is wrong to break the rules, and would feel guilt and shame if he or she did break the rules, then it is unlikely that rule-breaking will be perceived as an action alternative (Wikström et al., 2012). Therefore, moral emotions work with personal moral rules to filter people's perceptions of action alternatives (Wikström et al., 2012).

Moreover, it is reasonable to suggest that individuals hold anticipatory moral emotions in relation to specific types of moral rule-breaking. To this point, Hirtenlehner and Hardie (2016) recently utilised a measure of shoplifting-specific morality comprised of the composite of shoplifting-specific moral rules *and* moral emotions with an Austrian sample of male and female school students aged between 12 and 15 years. Hirtenlehner and Hardie (2016) found that weak shoplifting moral rules and moral emotions corresponded with significantly higher frequency of self-reported acts of shoplifting than strong shoplifting moral rules and moral emotions.

Drawing upon SAT's characterisation of morality, I submit that individuals hold IPV-specific moral rules and moral emotions, and that a person intends to break the moral rules that prohibit violent conduct within intimate relationships because:

1. he or she does not think that breaking such rules is wrong, and

2. he or she does not care strongly about abiding by these rules.

Accordingly, it is hypothesised that individuals with weak IPV morality will perpetrate more acts of physical IPV against intimate partners than those with strong IPV morality.

2.5.2 The Moral Context

Within the SAT framework of moral action, individual morality is fundamental to the perception of action alternatives, but it is only one part of the perception process. Fully conceived, the perception of action alternatives is guided (or filtered) by the interaction between individual morality and the moral context of the setting (e.g. Wikström et al., 2012; Wikström, 2006; see Figure 2.1 below).[49] The combination of the moral rules of a setting, and the extent to which the rules are imposed, creates the moral context (Wikström et al., 2012). While individuals vary in their personal moral rules, settings also vary in their moral rules, and the extent to which they are enforced (Wikström, 2014; Wikström & Treiber, 2016). The moral context is particularly important in the situational analysis of moral action. A person carries out an action in a setting, and the features of a setting (i.e. the components of the moral context) must interact with personal morality to instigate the perception of action alternatives (Wikström et al., 2012). Thus, analysis of the moral context of the setting in which action occurs is crucial to understanding of the causes of moral actions.

Some settings are criminogenic because the moral rules of the setting are contrary to the formal moral rules of law and/or the rules of law are weakly enforced, while other settings discourage rule-breaking because the moral norms are in line with the formal moral rules of law and are enforced (Wikström, 2014; Wikström et al., 2012; Wikström & Treiber, 2016, in press). For example, most (although not all) acts of IPV occur within the private context of the home (Dobash & Dobash, 1984; Sebastian, 1983; Wikström & Treiber, 2009; Wilkinson & Hamerschlag, 2005),

[49] SAT clearly distinguishes 'setting' (immediate setting) from 'situation' (the interaction between the person and the immediate setting) (e.g. Wikström et al., 2012; Wikström & Treiber, 2016; see further, Chapter 3).

and while the rules of law still apply, the private nature of the home reduces the extent to which behaviour can be monitored and laws enforced (Mooney, 2000; Sebastian, 1983). In this example, the moral context of the home may be considered weak, and thus facilitate the perception of IPV as an action alternative in a person with weak IPV morality.

The moral context can also be understood from a broader socio-legal perspective, and refer to the moral norms of a jurisdiction and their level of enforcement (see Wikström & Treiber, 2009, p. 91). It follows that where a person's personal moral rules are in line with the rules of the law, the person is considered to have a strong 'law-relevant' morality and law-breaking is unlikely to occur; by contrast, when there is a lack of correspondence between personal moral rules and the rules of law, crime is more likely to occur and individuals are said to have a weak law-relevant morality (Wikström, 2010a, 2014; Wikström et al., 2012).[50] This interaction between personal moral rules and the moral rules of the context (whether the context is the immediate setting or the wider social context of a state or nation) is referred to as the 'principle of moral correspondence' (Wikström, 2010a; Wikström et al., 2012).

While both the moral context of the immediate setting and the broader socio-legal moral context are both relevant to the analysis of IPV, this thesis focuses on the socio-legal moral context of IPV in the UK. The national, legal context of the study is guided by English and Welsh law, which considers acts of violence within intimate relationships to be held to the same standards as violence between non-intimates (Crown Prosecution Service, 2009; see Chapter 1). Therefore, within this thesis, the focus is on the correspondence between individuals' personal IPV-specific morality and the socio-legal moral context of the UK.

[50] Furthermore, a lack of moral correspondence (i.e. moral incongruity), is likely where you have two (or more) competing or coexisting legal systems (legal pluralism), for example, where religious law conflicts with state law, or where colonial law conflicts with indigenous law (see Larcom, 2014). If a person's personal moral rules are in line with a non-state legal order, and the non-state legal order is incongruent with the state legal order regarding which behaviours are considered criminal, by following the non-state legal order the person will likely break the rules of the state legal order (i.e. commit a crime), although he or she will believe that they are acting morally. Of course, multiple legal systems do not necessarily conflict with one another (Heimer, 2010).

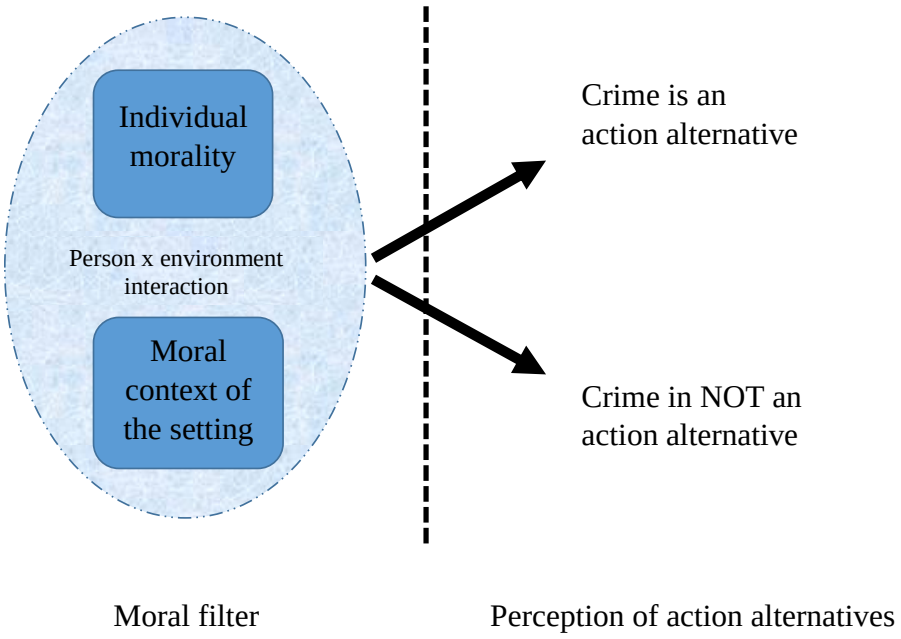

Figure 2.1. The moral filter

Adapted from: Wikström, P.-O. H., Oberwittler, D., Treiber, K., & Hardie, B. (2012). Breaking rules: The social and situational dynamics of young people's urban crime. Oxford: Oxford University Press.

2.6 Moral Rule-Breaking: Summary

In Chapter 1, I contended that as a class of behaviour that is clearly unlawful, it is appropriate (even necessary) that the causes of IPV should be analysed through the lens of a general theory of crime, namely SAT. Within this chapter I have introduced the core assumptions that underlie SAT's approach to analysing the causes of crime, specifically the rule-guided nature of human action, and the central role of morality in the SAT framework.

Throughout this chapter, I have added depth to, and further developed, some existing arguments made by SAT. Scholars have afforded prominence to understanding the nature of human morality and its role in guiding human behaviour throughout history, yet morality plays a comparatively subordinate role in theories of crime. By contrast, SAT places morality at the core of its explanatory framework of criminal actions (Wikström, 2010a). SAT is based on the assumption that human actions are fundamentally rule-guided; the law is a system of formal moral rules; and acts of crime are acts that break formal moral rules (Wikström et al., 2012). While SAT is a theory of moral rule-breaking action, I made clear that SAT is not moralistic in its approach to the law or in its explanation for why people break the law. I defined SAT's construct of individual morality as a

composite of personal moral rules and moral emotions, which interact with the moral context of the setting to guide perception of action alternatives. SAT considers morality to be pivotal in guiding our *perception* of rule-following or rule-breaking action alternatives (Wikström, 2006), and thus can be distinguished from theories of human behaviour that consider the ability to exercise self-control to be the measure of morality.

In defining and establishing IPV as a form of moral rule-breaking, I have built upon Wikström and Treiber's (2009) theoretical application of SAT to violence and have presented a unique approach to the conceptualisation of IPV. Like violence generally, acts of IPV are moral rule-breaking actions, which are guided by rules of conduct. A central argument of this thesis is that a criminological analysis of why a person perpetrates IPV should focus on the rule-breaking that the IPV actions represent, and why a person would intend to break the rules guiding violent conduct between intimate partners. It follows that this thesis provides a novel contribution to the IPV literature.

I have asserted that whether a person perceives IPV as an appropriate action alternative is determined by individual IPV-relevant moral rules and emotions (IPV morality), and the relevant moral rules of the setting and their level of enforcement (the moral context). Thus, individual IPV-relevant morality is hypothesised to play a pivotal role in understanding why a person would intend to break formal or informal rules prohibiting violence against a partner. While the SAT literature refers to action specific moral rules and moral emotions, no study has examined IPV-specific moral rules and moral emotions as defined by the SAT framework. In this thesis, I use a composite measure of IPV morality, comprised of IPV-specific moral emotions and moral rules, to examine the role of morality in moving people to commit acts of IPV. In doing so, this thesis provides a novel contribution to the SAT literature, and provides a unique approach to analysing the causes of IPV. This chapter serves as the bedrock for the next two chapters, which address the causal and motivation processes of the SAT framework.

3: The Causal Framework in Situational Action Theory

In the previous chapter I emphasised the central place of morality in situational action theory's (SAT's) explanation for why crime (moral rule-breaking) happens, and situated intimate partner violence (IPV) as a form of moral rule-breaking. Within this chapter I present *how* SAT submits the *causes* of acts of moral rule-breaking (such as acts of IPV) should be analysed and thus explained as moral rule-breaking actions. Wikström (e.g. 2011, 2017) contends that a theory of the causes of crime (moral rule-breaking) should identify those correlates that are likely to be most '*causally relevant',* and posit the mechanism/s (process/es) by which a person is 'moved' to break moral rules. In this chapter I further illustrate the importance of taking a mechanismic approach to understanding the causes of moral rule-breaking, and describe the causal mechanism in SAT. In doing so, I demonstrate how acts of IPV can be explained within the SAT framework, and how this framework can be applied to explaining both male and female IPV perpetration.

3.1. Theoretical Fragmentation and Copious Correlates: The Roadblocks to Scientific Progress

> Criminology is a fragmented discipline and its key theoretical and empirical insights are poorly integrated
>
> (Wikström et al., 2012, p.3)

A key observation that underlies the analytical framework of SAT is the theoretical and empirical fragmentation that plagues criminology (Wikström et al., 2012). Criminology is a discipline rich in theories: there are numerous theories positing the causes of crime from varying perspectives, whether it be the level of analysis (e.g. at the individual, environmental, or situational level), or the key variable/s of interest (e.g. self-control or anomie) (Cullen, Wright, & Blevins, 2006; Pratt, 2016). Criminology has been described as a discipline of "theoretical vitality" and "theoretical vibrancy" (Cullen, Wright, & Blevins, 2006, p. 1). However, such theoretical richness and diversity is a double-edged sword: with increasing numbers of theoretical offerings comes a fragmented discipline (Bernard, 1990; Bernard & Snipes, 1996; Cullen et al., 2006; Liska, Krohn, & Messner, 1989; Wikström et al., 2012). Arguably, the primary source of the theoretical disjunction in criminology is the tendency within the discipline to accumulate new theories, and modify existing theories, but to avoid falsifying and subsequently rejecting theories that are not, or cannot, be falsified (Bernard, 1990; Bernard & Snipes, 1996; Cullen et al., 2006).[51] The hesitancy of criminologists to develop falsifiable theories, or to reject falsified theories, risks undermining criminology's status as a scientific discipline, and hinders progress towards understanding the causes of crime (Bernard, 1990).

[51] Falsifiability is a central tenet of scientific theory development (see Bernard & Ritti, 1990; Popper, 1972). In order for a theory to be falsifiable, there must be the possibility of an empirical finding that does not support the key assumptions of the theory (Popper, 1972). The manner in which the theory can be falsified should be set out by the theorist/s i.e. they should be able to provide a statement that identifies "specifically what observations *would* falsify the theory" (Bernard & Ritti, 1990, p. 9, emphasis in original; see also Popper 1972, p. 86-87, regarding the use of falsifiability hypotheses). However, a single occurrence of an empirical finding contradictory to the theory is not sufficient to reject a theory: "a few stray basic statements contradicting a theory will hardly induce us to reject it as falsified. We shall take it as falsified only if we discover a *reproducible effect* which refutes the theory" (Popper, 1972, p. 86, emphasis in original).

In addition to theoretical fragmentation, criminology suffers from empirical fragmentation (Wikström et al., 2012). Research in criminology has produced a profusion of crime correlates, from genetic factors through to societal factors, yet, correlates of crime tell us very little (if anything) about *how* crime happens (e.g. D. P. Farrington, 2003; Wikström, 2011; Wikström & Treiber, 2013). The argument made by Wikström (e.g. 2011) is that there are so many correlates of crime that the true causes of crime are obscured, and that "most crime correlates are likely, at best, to be merely markers or symptoms and, hence, lack relevance for crime causation" (Wikström, 2011, p. 54). It follows that a fragmented understanding of the causes of crime translates into the (often) ineffective prevention and treatment of crime (Wikström, 2007a; Wikström et al., 2012). By developing a more cohesive understanding of the causes of crime, and the mechanisms that underlie these causes, we will become better equipped to develop more targeted and effective crime prevention and intervention programmes (Sampson, Winship, & Knight, 2013; Wikström, 2007a).

The field of IPV research is similarly theoretically and empirically fragmented. Theories of IPV have emerged from numerous disciplines and sub-disciplines, and address varying levels of analysis (for overviews see, Ali & Naylor, 2013a, 2013b; Dardis, Dixon, Edwards, & Turchik, 2015; Finkel & Eckhardt, 2013). Finkel and Eckhardt (2013) observe that the IPV literature is besieged by correlates that have been posited by theorists, or identified by empirical research, as contributing to the causes of IPV (for reviews of IPV risk factors see, Capaldi et al., 2012; Dardis, Dixon, et al., 2015; Hotaling & Sugarman, 1986; Schumacher et al., 2001; Stith et al., 2004). Yet, despite the many correlates of IPV that have been identified, there is little agreement on (as well as convincing evidence of) the causal influence of these variables to result in acts of IPV (see also, Bell & Naugle, 2008; Finkel & Eckhardt, 2013).

IPV scholars have begun to recognise the hampering effect that empirical fragmentation has had on progress towards understanding the causes of IPV (e.g. Bell & Naugle, 2008). Similarly, scholars have identified that the lack of theoretical and empirical synthesis that exists within the IPV literature has translated into a fragmented approach to prevention and intervention (Dixon & Graham-Kevan, 2011).

3.1.1 Making Sense of the Correlates: An Analytical Approach to Understanding Crime

The point to be emphasised here is not to say that correlates of crime are unhelpful to our understanding of how crime happens – some correlates are undoubtedly related to crime, but most are unlikely to be 'causally relevant' (Wikström, 2006, 2011, 2017). The causes of crime should be able to explain how someone is 'moved' to commit an act of crime, a requisite that many of the correlates of crime fall short on:

> It is unlikely that, for example, having many siblings, a slow resting heartbeat, a mother who smoked during pregnancy or a poor educational record, or being unemployed or living in public housing, is a factor that would move a person to shoplift, vandalise a car, beat up a stranger, burgle a house or commit an act of rape (Wikström, 2011, p. 54).

A sound theoretical foundation can make sense of the correlates of crime by explaining their causal relevance (Wikström, 2017).[52] To this point, Wikström (2010a) has argued that the fragmentation found in criminology is "not an empirical but an *analytical* problem" (p. 213, emphasis in original). Namely, there is a need for theories "to identify a credible mechanism that specifies how the risk factor in question transforms into action (acts of crime) to justify its status as a probable cause" (Wikström, 2005, p. 216). Accordingly, the position advanced by Wikström (Wikström, 2017; Wikström & Treiber, 2013) is that in order to move beyond the theoretical and empirical fragmentation in criminology, we need to work towards a more *analytical* criminology.[53]

Analytical criminology is based on scientific realism (Pauwels, Ponsaers, & Svensson, 2009; Wikström & Treiber, 2013). Put briefly, scientific realism regards social facts (e.g. acts of crime) from an objective perspective: "causes and explanations are not invented, but discovered" (Pauwels et al., 2009, p. 140; see also M. Bunge, 2006, p. 17; Wikström & Treiber, 2013, p. 320). Realism also diverges from the strict empiricist focus on observable phenomena, and emphasises the importance of incorporating mechanisms (which may or may not be observable) into our scientific explanations of causation (Pauwels et al., 2009; Wikström, 2017; Wikström & Treiber, 2013). Thus, analytical criminology is heralded as a path towards a more explanatory criminology: it provides a means of advancing from prediction to explanation in order to answer questions of why and how people are moved to engage in acts of moral rule-breaking (Wikström, 2017).

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[52] For a detailed discussion of the importance of sound theory in research see Bernard and Ritti (1990).

[53] The principles underlying analytical criminology are grounded in analytical sociology (see Pauwels, Ponsaers, & Svensson, 2009).

SAT was developed as a "*foundation* for a more analytical criminology" (Wikström & Treiber, 2013, p. 329; my emphasis). Accordingly, Wikström (e.g. Wikström et al., 2012; Wikström & Treiber, 2009; Wikström, 2004, 2005, 2010a, 2010b) has set out the requisites of a sound, analytical, theory of crime (i.e. a theory that posits how a person is moved to commit an act of crime; Wikström, 2006, 2017). First, the theory should clearly define the subject of study (e.g.i. crime as moral rule-breaking actions; see Chapter 2); it should identify the causally relevant features of the person (e.g. moral rule-breaking propensity) and the setting (e.g. the moral context) necessary for action (again, see Chapter 2); and delineate the mechanism/s (process/es) by which the person and the setting interact in order to cause (move) a person to action. Finally, this situational causal process must be positioned within the broader social context and the context of individual development.

Within this chapter I detail the analytical framework of SAT, and, drawing on both the insights and deficiencies of existing IPV theory and research, illustrate how viewing IPV through the lens of an analytical framework grounded in scientific realism can help answer the questions of why and how people are moved to commit acts of violence against an intimate partner. However, I begin by addressing a fundamental concept in analytical criminology: the importance of causal mechanisms.

3.2 Moving from Prediction to Explanation: The Importance of Mechanisms in Establishing Causation

> the hallmark of modern science is the search for lawful mechanisms behind the observed facts, rather than the mindless accumulation of data and the mindless search for statistical correlations among them
>
> (M. Bunge, 2004, p. 207-208)

> a mechanism is an irreducibly causal notion
>
> (Hedström & Ylikoski, 2010, p. 50)

Within the philosophy of science, the topic of causation is complex and contentious, and is far beyond the scope of this thesis. Rather, in this section I provide an overview of key perspectives on causation, and concentrate on the characterisation of causation that is adopted by SAT. The definition of causation that underlies the SAT framework begins as follows: "Causation implies a regularly occurring (asymmetric) association between time-ordered variables that hold universally (or at least in a specific context or under certain circumstances) that make it possible to predict one (the effect) from the other (the cause)" (Wikström, 2011, p. 57). It is this description of causation that corresponds with the theory of causation advocated by empiricist/positivist philosophers of science such as Hume, who "rejected causal mechanisms" (M. Bunge, 1997, p. 423).[54] It is this empiricist/positivist view of causation that underlies the risk factor approach in criminology (as well as other disciplines). However, Wikström's (2011) definition of causation, which is of upmost importance to an analytical approach, is that an understanding of causation must *also* include "a *causal process* that links the cause to the effect" (p. 57, my emphasis).

Within the social sciences, mechanisms are a relatively new issue of concern (M. Bunge, 1997; Gerring, 2008; Hedström & Ylikoski, 2010), indeed knowledge of causal mechanisms in the social sciences is "almost non-existent" (Aalen & Frigessi, 2007, p. 156).[55] Yet, mechanismic causation is not a new concept, with references to 'mechanisms' having been made by philosophers as far back as Aristotle (see M. Bunge, 1997, p. 443). The meaning of 'mechanism' has evolved considerably over the centuries, from being characterised as a purely mechanical process, towards a more expansive characterisation that recognises the many incarnations that a mechanismic process can take (M. Bunge, 1997; Gerring, 2008). Nevertheless, while the finer details of the exact nature of mechanisms continues to be a contested issue across a broad range of scientific disciplines, from the natural sciences (e.g. Machamer, Darden, & Craver, 2000) through to the social sciences (e.g. Gerring, 2008; Hedström & Ylikoski, 2010; Mayntz, 2004), at its core, a mechanism refers to "the pathway or process by which an effect is produced" (Gerring, 2008, p. 178).

Most mechanisms (particularly in the social sciences) are not tangible (i.e. they are unobservable); therefore, mechanisms are typically theorised processes put forward to explain how something (e.g.

[54] For a detailed analysis of Hume's definition of causation, referred to the constant conjunction formula, see M. Bunge (1979).

[55] For example, M. Bunge (1997, p. 411) reports that between 1975 and 1995, the Annual Review of Sociology did not contain a single review article that addressed the issue of social mechanisms.

a type of behaviour) happens (M. Bunge, 1997, 2004; Mahoney, 2001).[56] The (often) inconspicuous nature of mechanisms led to mechanismic causality being largely rejected by empiricist/positivist philosophers, such as Hume, who were concerned with "descriptions of observable facts and for associations between directly observable variables" (M. Bunge, 1997, p. 421). The Humean view of causation (put simply) is descriptive and predictive rather than explanatory (M. Bunge, 1997, 2004), and is a highly restrictive approach to understanding causation, providing little room for exploring questions of why and how (Gerring, 2008).[57] By contrast, incorporating mechanisms into our understanding of a phenomenon (such as criminal actions), allows us to move beyond correlation and observed relationships, and towards more informative models of causation (Wikström, 2011). Causal mechanisms provide meaning to the observations made in experiments or in quasi-experimental studies, and to statistical relationships between variables (e.g. M. Bunge, 1997; Elster, 2007; Wikström, 2011; Woodward, 2002). Moreover, they provide an antidote to what has been referred to as the "blind empiricism" that can result from a strict a-theoretical focus on correlates and risk factors of crime (Pauwels et al., 2009, p. 140).[58]

Further to the important explanatory value that mechanisms provide to statements of causation, by requiring researchers to consider how (the process by which) purported risk factors cause behaviour, a mechanismic approach (i.e. an analytical perspective) provides a method of conceptual refinement whereby spurious risk factors are discarded and those risk factors that may prove to be causally relevant are concentrated upon (Wikström, 2011). Similarly, Hedström and Ylikoski (2010) clarify that a mechanism does not need to take account of all possible factors or variables, but rather a mechanism "seeks to capture the crucial elements of the process by abstracting away the irrelevant details" (p. 53).

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[56] However, Mayntz (2004) notes that mechanisms "can be, but must not be, unobservable" (p. 242).

[57] For a detailed analysis and discussion of causation see further, M. Bunge (1979), von Wright (1971).

[58] A point of clarification concerns the distinction between mediating variables and mechanisms, namely that intervening, or mediating variables, are not necessarily mechanisms (Gerring, 2008; Hedström & Ylikoski, 2010; Mahoney, 2001; Mayntz, 2004; Vanderweele, 2009). To simply include a variable as a mediator (M) through which X leads to Y is not sufficient for M to be considered a mechanism, one needs to consider the process or processes, and the conditions by which M mediates the relationship between X and Y (Vanderweele, 2009). For example, an intervening variable (M) is entered into a correlational analysis with variables X and Y, whereby the relationship between X and Y is explained by the correlations between X and M, and M and Y; M by itself is not a mechanism. However, the *process* by which X is related to M, and M is related to Y, can be understood as a mechanism, but cannot be entered into the analysis (Mahoney, 2001). Similarly, a *moderating* variable may represent an explanatory mechanism. A moderating variable is a variable that influences the relationship between X and Y, whereby "*X*'s effect on *Y* varies as a function of some third variable *M*, the moderator variable" (Hayes, 2009, p. 415, emphasis in original). Yet the process by which the moderating variable influences the relationship between X and Y does not form part of the statistical analysis. Thus, mechanisms are (typically) unobservable processes that can be posited to make sense of the observed relationship between variables (Gerring, 2008; Mahoney, 2001).

It follows that in taking an analytical approach to explaining the causes of crime, the focus of SAT is to identify variables that are causally relevant to crime, and to specify the mechanisms by which these variables result in criminal (rule-breaking actions). The remaining sections of this chapter are devoted to detailing the analytical framework of SAT.

3.3 Distinguishing the Social from The Situational Model in Situational Action Theory

> individual action and social environment – or agency and structure always come together because they generate one another
>
> (M. Bunge, 1997, p. 457)

> Person-setting interactions take place in, and are dependent on, the wider social context
>
> (Wikström et al., 2012, p. 9)

Proponents of an analytical criminology contend that explanations of crime must take account of both micro and macro processes and their interaction (Pauwels et al., 2009; Wikström, 2017; Wikström & Treiber, 2013).[59] In line with this principle of analytical criminology, SAT is an integrative theory of moral rule-breaking comprised of both situational and social mechanisms (Wikström, 2014; Wikström & Treiber, 2013, in press).

It is often stated that to understand the causes of behaviour, such as acts of IPV, we need to conduct longitudinal studies (e.g. Walters & Mandracchia, 2017; for a detailed discussion of this issue see Hardie, 2017). However, longitudinal-developmental studies investigate the causes of *propensity* for a particular type of behaviour rather than the causes of *action* (Wikström & Treiber, in press). A key supposition of SAT is that the direct causes of moral rule-breaking actions should be

[59] See also Hedström and Ylikoski (2010) regarding the importance of understanding the system of (micro-level) mechanisms that underlie macro-level associations. Similarly, Gerring (2008) has noted a shift in economics and political science from macro-level to micro-level analysis, the view being that a preoccupation with macro-level analysis had previously obscured the search for causal explanations.

analysed situationally, namely, at the level of the person-environment interaction (Wikström, 2017; Wikström & Treiber, 2016). Thus, the causes of criminal actions are those factors and processes that directly move a person to action (referred to as the 'situational dynamics' of action) (Wikström et al., 2012). Yet, it is important to emphasise that SAT does not disregard the role of broader social factors, or the role of individual developmental factors in crime causation. While situational dynamics (the person-setting interaction) are central to understanding how *acts* of crime happen, SAT recognises that situations are the result of broader developmental and social-ecological processes (Wikström, 2014; Wikström & Treiber,in press).

Developmental and social-ecological processes are analysed within the social model of SAT, and are referred to as the 'causes of the causes' of crime (Wikström, 2006, 2011, 2014; Wikström & Treiber, in press).[60] Within the social model of SAT, the causes of the causes pertain to the factors and processes that explain how people develop a crime propensity (the process of personal emergence), how places becomes criminogenic (the process of social emergence), and how certain people and places come to interact (the processes of social and self-selection) (Wikström, 2006, 2011; Wikström et al., 2012). Thus, the social model explains how the situations (the person-environment interactions) in which acts of crime occur are produced (Wikström, 2007b, 2014). Figure 3.1 depicts the integrated social and situational models of SAT.

[60] The 'causes of the causes' is a term borrowed by Wikström from Elster (1999, p.30; see Wikström 2006).

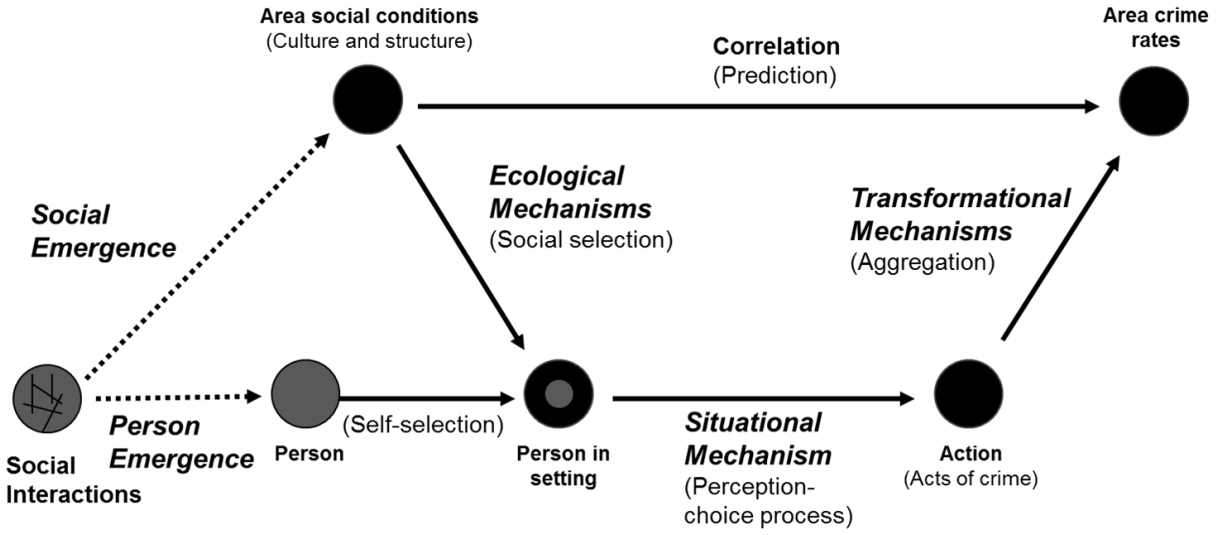

Figure 3.1. The social model of SAT

Source: Wikström, P.-O. H. (2011), Does everything matter? Addressing the problem of causation and explanation in the study of crime. In J. M. McGloin, C. J. Sullivan, and L. W. Kennedy (eds). When crime appears: The role of emergence. London: Routledge.

The integration of the social and the situational models in SAT is reminiscent of what Mario Bunge (1997, 2004, 2006) refers to as 'systemism'. Systemism is described as an approach that incorporates bottom-up individualism (microreductionism) and top-down holism (macroreductionism), whereby "to explain how a system works - that is, to unveil its mechanism - one must not only take it to bits (microreduction) but also show how the bits fit together, giving rise to emergent features (macroreduction)" (M. Bunge, 1997, p. 441). Furthermore, an integrative micro-macro approach avoids the 'ecological fallacy' criticism faced by theories that attempt to explain individual behaviour using macro level (aggregate) data (Pauwels et al., 2009).

The ecological fallacy occurs when inferences about individuals and their actions are based on ecological data (i.e. data at the macro-level) (Freedman, 2001). For example, the prominent feminist sociocultural perspective of IPV is grounded in the assumption that IPV is a (predominantly) male-perpetrated phenomenon driven by patriarchal social structures and ideology (e.g. Dobash, Dobash, Wilson, & Daly, 1992; Dobash & Dobash, 1979; Straus, 1976; Yllö & Straus, 1990).[61] Accordingly, research that examines the relationship between patriarchal *social*

[61] I acknowledge that 'feminist sociocultural theory' is a broad umbrella term, and that references to 'feminist' perspectives have long been criticised as an over-simplification (Daly & Chesney-Lind, 1988; Simpson, 1989).

structure and the aggregate rate of male-to-female IPV perpetration (see for example, a series of analyses by Archer, 2006; Straus, 1994) is what can be termed an 'ecological correlation' meaning that "the statistical object is a *group* of persons" (W. S. Robinson, 1950, p. 351). When the level of analysis is at the group level, it does not and cannot explain individual variation: what is being analysed is the aggregate of individuals, without understanding the processes that contribute to the aggregate level data (Freedman, 2001). Moreover, we cannot analyse the causes of aggregate data, as Wikström (2007) observes: "There can be no causes of an aggregate of acts but each act that makes up the aggregate can have a cause" (p. 343).

Dutton (1994) cited the ecological fallacy in a critique of the feminist sociocultural emphasis on patriarchal social structure as a cause of IPV.[62] Moreover, Dutton (1994) highlighted the limited explanatory value of 'single-factor' theories of IPV (see also, e.g. Archer, 2000; Heise, 1998). It follows that Dutton (1995) has advocated an integrated, nested ecological framework that can be used to build 'profiles' of IPV perpetrators (i.e. which factors predict the development of the abusive personality, and the circumstances under which such a person may be more likely to act violently). Drawing upon nested ecological models such as Brofenbrenner's (1977) ecological model of human development, Dutton (1995) organised putative social and psychological features of IPV perpetrators into nested ecological levels.

Dutton's (1995) integrated model provides a framework comprised of four levels: the macrosystem (i.e. sociocultural variables such as cultural and societal values), the exosystem (i.e. sociological variables such as unemployment, younger age, low income), the microsystem (the family or couple structure and context i.e. the context within which the individual couple engage in conflict, including factors such as marital satisfaction and jealousy within the relationship), and the ontogenetic level (the psychological features of the person, and how they developed i.e. attitudes towards violence, anger, sex-role attitudes) (see further, Dutton, 1995, p. 47-59). The rationale underlying the nested ecological model is that social interactions (i.e. interactions that result in IPV) should be analysed from the bottom up: "This approach allows social-psychological analysis

[62] Note that Dekeseredy (DeKeseredy, 2011; DeKeseredy & Dragiewicz, 2007) has cautioned that few feminist scholars who study IPV regard patriarchy as the *single* or *direct* cause of IPV, and emphasises that patriarchy is a complex social system and ideology that is expressed at the macro and micro level.

to be sensitive to the socio-political context that shapes behavior while accounting for individual differences in behavior" (Dutton, 1995, p. 46).[63]

Dutton's nested ecological model has been heralded as a promising framework which, by integrating different levels of analysis, can begin to make sense of the vast collection of correlates associated with IPV (Dixon & Graham-Kevan, 2011). However, I submit that the model suffers from two fundamental flaws: first, it does not specify *how* (the mechanisms by which) the variables within and between the ecological levels interact. Second, the model does not provide a situational (person-environmental) model of violent *action*. As such, the nested ecological model does not conform to the analytical, mechanismic approach to understanding behaviour advocated by SAT, and which I adopt within this thesis.

Within this section I have broadly distinguished the social model from the situational model in SAT in order to illustrate that SAT provides an integrated framework for analysing both the causes and the causes of the causes of crime. I have also drawn attention to the ecological fallacy, and thus the importance of using the appropriate level of analysis when making inferences about the causes of individual actions. This thesis is concerned with explaining the causes of IPV actions, and thus the focus is the situational model of SAT. It is to a more detailed consideration of the importance of a situational analysis of action that I now turn.

3.4 The Importance of a Situational Analysis of Action

> People are the source of their actions … but the causes of their actions are situational
>
> (Wikström & Treiber, 2013, p. 322)

> put the interaction in the centre of the analysis, not the individual, the social background, the culture, or even the motivation: that is to say, look for the characteristics of violent situations
>
> (Collins, 2008, p. 1)

[63] For a similar nested ecological approach for the organisation of factors known to predict violence against women, see Heise (1998).

As I have already stated, a key supposition of SAT is that the causes of actions should be analysed situationally, namely, at the level of the person-environment interaction (Wikström, 2017; Wikström & Treiber, 2016). The import of the person-environment interaction to explain human behaviour is not a new concept (see Sidebottom & Wortley, 2016; Wikström & Treiber, 2016). For example, the social psychologist Kurt Lewin (Lewin, 1936) advanced the view that behaviour is, and thus should be analysed as, the product of person-environment interactions. Yet, individual and environmental theoretical integration is lacking in criminology: theories of criminal behaviour tend to focus on either the individual *or* the environment, without explaining *how* the two interact (Wikström, 2010a; Wikström et al., 2012). This is not to say that the person-environment interaction is completely disregarded in criminology; sometimes an individual level theory will acknowledge the role of the environment, and vice versa, but the process by which the person and the environment interact is rarely, or sufficiently, integrated into the theory (Wikström, 2010a; Wikström et al., 2012; Wikström & Treiber, 2009, 2016).[64]

Moreover, there is an air of ambiguity surrounding what denotes a situational analysis of crime. Wikström and Treiber (2016) observe that the concepts of situation and immediate environment are often conflated. Key points of clarification made by Wikström and colleagues (2012, p.14-15) are that within the framework of SAT, the environment is held to be the wider environment: "all that lies outside the person", while the setting refers to a person's immediate environment, and the situation is *the product of the person-setting interaction*.

Wikström's (e.g. Wikström, 2010a, 2017) contention is that where particular variables are identified as being situationally relevant, an adequate situational analysis needs to posit the process/es by which such variables move a person to action, and to account for individual differences in how individuals respond to similar constellations of motivating and deterring factors. Likewise, a situational framework should be able to suggest why the same individual responds differently to the same (or similar) stimuli at different points in time and in different contexts (e.g. Wikström, 2014, 2017). Thus, a situational analysis is one "that specifies which combinations of what personal and environmental factors (*interactions*) initiate what processes (*action mechanisms*) that bring about the crime event" (Wikström & Treiber, 2016, p. 416, emphasis in

[64] To this point, Wikström and Treiber (2016) provide a detailed critique of routine activity theory (RAT; L. E. Cohen & Felson, 1979) and the rational choice perspective (RCP; Cornish & Clarke, 2008), two criminological theories that allude to a person-environment interaction but which, Wikström and Treiber (2016) argue, fall short of providing a sufficient account of the person-environment interaction.

original).[65] Accordingly, the situational dynamics of action, the process/es generated from the person-environment interaction, are central to analysing and explaining the causes of moral rule-breaking actions in SAT (Wikström et al., 2012).

The objective of this thesis is not only to situate IPV as a form of moral rule-breaking action, but to also illustrate how IPV can be explained as the outcome of a situational person-environment interaction. Yet, an important caveat is necessary: while the analytical framework adopted within this thesis is situational, the data collected and analysed is at the individual level, and thus provides only a partial test of SAT. Nevertheless, the meaning of the individual level analysis is appraised within the context of SAT's situational framework. Furthermore, the meaning of the analysis is underpinned by a key principle of analytical criminology, namely the importance of positing the causal mechanisms that underlie how and why rule-breaking actions (such as acts of IPV) occur.

3.4.1 The Neglect of the Person-Environment Interaction in Theories of Intimate Partner Violence

Like general theories of crime, theories of IPV can be faulted for neglecting situational analyses of IPV. Within the IPV literature there is a wealth of theory and research that focuses on identifying the individual psychological characteristics of IPV perpetrators, such as personality traits and psychopathology (e.g. Dutton, 1995; Dutton & Bodnarchuk, 2005; Holtzworth-Munroe, Meehan, Herron, Rehman, & Stuart, 2000), and cognitive processing errors (e.g. Anglin & Holtzworth-Munroe, 1997; Holtzworth-Munroe, 1992, 2000; Holtzworth-Munroe & Anglin, 1991; Holtzworth-Munroe & Smutzler, 1996; Murphy, 2013; Nedegaard & Sbrocco, 2014); as well as the features of relationships, such as relationship conflict (Coleman & Straus, 1990; Hotaling & Sugarman, 1986, 1990; Straus et al., 2006 [1980]), level of relationship satisfaction (for a review see, Stith, Green, Smith, & Ward, 2008), and equality within the relationship (e.g. Coleman & Straus, 1990). Equally, there exists a cornucopia of research grounded in environmental (social) theories, which analyse the causes of IPV from broad cultural, social, and family process perspectives (e.g. Dobash & Dobash, 1979; K. Farrington, 1980; Gelles, 1993; Straus et al., 2006 [1980]). Moreover, some scholars, in acknowledgment of the fragmented theoretical landscape, have put forward integrated frameworks of IPV, which assimilate different levels of analysis into

[65] Note the distinction between a purely statistical interaction between variables and an interaction that refers to the process by which a person and setting intersect (see, Hardie, 2017).

single frameworks (Dutton, 1995; Heise, 1998; Holtzworth-Munroe, Meehan, Herron, & Stuart, 1999; Riggs & O'Leary, 1996).

Yet, there remains a paucity of *situational* theories of the causes of IPV that align with SAT's contention that a situational theory should take account of the person-environment interaction. Some IPV scholars have advocated 'contextual analyses' or 'situational analyses' of violent events (Bell & Naugle, 2008; Dobash & Dobash, 1984; Riggs & O'Leary, 1996; Wilkinson & Hamerschlag, 2005), some of which touch upon the need to consider the features of the person and the features of the setting. However, these approaches to understanding violent events often refer simply to *proximal variables*, and neglect to posit a process by which the features of the person and the features of the setting in which the violence occurs interact. Namely, these approaches identify a collection of proximal risk factors for IPV but are not truly situational theories of IPV. In the following section, I present and critique some examples of these 'situational' approaches to analysing IPV events.

3.4.1.1 'Situational' Analyses of Intimate Partner Violent Events

Dobash and Dobash have long been advocates of the 'context approach' to understanding male-to-female IPV, and have underscored the importance of analysing the "dynamics of the violent event" within intimate relationships (Dobash & Dobash, 1984, p. 272; see also Dobash & Dobash, 1979, 1981, 2004). The context approach advanced by Dobash and Dobash is not itself a situational theory of IPV, but is used as a very broad term to refer to the context within which a violent event takes place, *but also* the relationship context (such as an ongoing pattern of abuse), and the wider social context: violent events are considered to be "shaped and legitimated by a wider socio-cultural context of patriarchal domination" (Dobash & Dobash, 1984, p. 286-287). As such, Dobash and Dobash's context approach examines the violent event through the lens of their feminist sociocultural perspective of IPV.

An analysis of the dynamics of the violent event is concerned with identifying the sequence of factors that instigate the violent event (e.g. an argument and the source of the argument, such as jealousy or domestic duties), the nature of the violent action (e.g. the type and severity of the violence, and use of weapons), and the aftermath of the violence (e.g. whether the woman seeks help, whether the man apologises) (Dobash & Dobash, 1984). Both qualitative and quantitative data collected on the dynamics of violent events provide a very detailed *description* of proximal

factors associated with incidents of IPV. However, despite the richness of the data obtained, the context approach as described by Dobash and Dobash (e.g. 1979, 1984; 2004) tells us very little about the person-environment interaction (the process) that moves to a person to commit an act of violence against his (or her) partner. Thus, it is not a truly situational analysis as defined by SAT.

Wilkinson and Hamerschlag (2005) identify the paucity of what they refer to as 'situational' frameworks in the theoretical and empirical IPV literature, and contend that a 'situational' analysis of violent events (i.e. incidents in which IPV occurs) can draw on existing perspectives, such as RAT and RCP from criminology, as well as the context approach endorsed by Dobash and Dobash (e.g. 1979, 1984; 2004). (However, as I have already noted, these perspectives do not conform to the definition of a situational theory as set out in SAT). More specifically, Wilkinson and Hamerschlag (2005) suggest that 'situational' approaches to understanding IPV should account for various antecedent factors, such as the quality of the romantic dyad and factors that may instigate the violent episode; factors relevant to the violent action itself, such as where the violent event takes place, the presence or use of weapons and alcohol; and factors associated with the consequences of violence, such as injury (Wilkinson & Hamerschlag, 2005).

Similarly, drawing on existing IPV theory and research, Bell and Naugle (2008) put forward a framework for analysing IPV events, which consists of 'contextual units' of proximal variables. In brief, 'proximal antecedents' refer to events such as a conflict with the partner; 'motivating factors' are variables that alter the influence of other factors, such as alcohol or drugs, or emotional states such as anger; 'discriminative stimuli' refers to factors that may reinforce the likelihood of violence occurring, such as the immediate setting (private vs. public); 'behavioral repertoire' refers to factors associated with the ability to engage in adaptive, social behaviour, such as ability to regulate emotions; 'verbal rules' are beliefs about the acceptability of using violence against a partner; and 'behavioural consequences' are outcomes of the violence that may either serve to punish the use of IPV (e.g. the police are called, the relationship ends) *or* reinforce the use of IPV (e.g. partner compliance) (see further, Bell & Naugle, 2008, p. 1102-1104).[66]

The frameworks set out by Wilkinson and Hamerschlag (2005), and Bell and Naugle (2008), draw upon existing theories and knowledge of proximal variables associated with IPV, and provide a

[66] The frameworks described by Wilkinson and Hamerschlag (2005) and Bell and Naugle (2008) are in line with 'functional analysis', which is often used in clinical and forensic psychology to analyse a criminal event (particularly sexual and/or violent offences) as part of a clinical assessment (see e.g. Blackburn, 1993).

structure for organising and analysing data obtained from participants' reports of a violent event. However, they are not themselves situational *theories* of IPV. Relatedly, while both frameworks identify features of the person *and* features of the immediate setting in which IPV occurs, there is an absence of a causal mechanism, a process that explains *how* and *why* the variables within each of the contextual units or domains interact to lead to violent action.

Finally, Bell and Naugle (2008) submit that part of the difficulty in developing a sufficient theory of IPV lies in the fact that theories generally "fail to adequately capture and address the complexity of variables implicated in IPV episodes" (p. 1097). This suggests that an adequate theory *needs* to incorporate the numerous variables that are purported to influence the occurrence of an act of IPV. Within this thesis I advance an alternative perspective: my aim is not to propose a specific theoretical model of IPV, but to illustrate how IPV can be analysed and explained as moral rule-breaking within the general criminological framework of SAT. In applying SAT's situational model, I contend that an adequate analysis of IPV as moral rule-breaking only requires the variables that are, conceivably, of *causal* relevance (i.e. they are part of the situational, person-environment interaction) to moral rule-breaking actions. In doing so, we can advance from the prediction of IPV to an explanation of *why* people break moral rules that prohibit IPV.

Having made clear the importance of a situational analysis of moral rule-breaking action, in the following section I delineate the situational (causal) mechanism of SAT: the perception-choice process.

3.5 The Perception-Choice Process: The Causal Mechanism in Situational Action Theory

> If we wish to understand a real thing, be it natural, social, biosocial, or artificial, we must find out how it works.
>
> (M. Bunge, 1997, p. 410)

SAT submits that a situational analysis of the interaction between the person and the setting is the level of analysis at which the direct causes of crime should be studied (Wikström et al., 2012).

More specifically, a key tenet of SAT is that to understand what moves a person to action, we need to identify the features of the person and the environment that are most likely to be causally relevant, and to posit and test hypotheses about *how* and *why* (the mechanisms by which) these individual and environmental variables result in an individual seeing and choosing crime as an action alternative (Wikström & Treiber, 2013).

Cognitive processes are mechanisms that orchestrate the person-environment interactions that lead to behaviour (Huesmann, 1998). In the SAT framework, the perception-choice process is the cognitive mechanism that provides the causal link between the person and the setting, and is central to the situational approach of SAT (Treiber, 2017; Wikström & Treiber, 2013). In Chapter 2, I set out the key individual and environmental elements of the perception process in SAT (morality and the moral context, respectively). Here, I elaborate on these concepts, and introduce the process of choice, and the conditional relevance of internal and external controls. Accordingly, I will illustrate how the components of the processes of perception and choice fit together to create the perception-choice process in SAT.

3.5.1 A Process of Choice Begins with The Perception of Action Alternatives

> A great deal of theoretical and empirical attention has been invested in exploring how and why people choose between alternatives, but much less attention has been given to understanding how and why people perceive different alternatives.
>
> (Treiber, 2014, p. 194)

According to SAT, the decision-making process leading to a choice regarding action or inaction, begins with the perception of action alternatives in response to motivation (Wikström, 2006; regarding motivation, see Chapter 4). A key argument set out in the SAT literature is that to understand why people commit acts of moral rule-breaking, we first need to understand why some people come to perceive moral rule-breaking as an action alternative and others do not (see, Treiber, 2014, p. 194; Wikström, 2006, p. 81). This argument sets SAT apart from the status quo within criminology, namely the tendency of theoretical frameworks based on utilitarian principles of

human behaviour to posit a deliberative decision-making processes, without consideration of how a person gets to a position of choosing between action alternatives in the first place (Treiber, 2014; Wikström, 2006).

The perception of rule-breaking as an action alternative is guided by the individual's personal moral rules and moral emotions (Treiber, 2014; Wikström, 2006; see Chapter 2). However, perception of rule-breaking is not only guided by individual morality; rather, individuals come to perceive rule-breaking as an action alternative via the interaction between personal morality *and* the moral context of the setting: the moral filter (e.g. Wikström et al., 2012; see Chapter 2). Thus, 'perception' within the SAT framework not only refers to whether a person sees rule-breaking as an action alternative (as a product of his or her morality), but it also plays a key role in connecting the person to his or her immediate environment (Wikström, 2006, see in particular p. 81-84).

For SAT if a person's morality is sufficiently strong, and/or the moral context of the setting discourages crime, then crime is unlikely to be perceived as an action alternative in response to a motivating force and crime is unlikely to occur (e.g. Wikström et al., 2012). In such instances, crime does not occur because the person's moral filter precludes him or her from *perceiving* actions that break the rules as viable alternatives (Wikström et al., 2012; Wikström & Treiber, 2009). By contrast, if a person has a sufficiently weak morality and/or the moral context of the setting does not discourage crime, the outcome of the moral filter is likely to result in him or her perceiving crime as an action alternative (e.g. Wikström, 2014).

In Chapter 2 (Section 2.5.1.1) I aligned the concept of moral rules in SAT to the construct of attitudes. In doing so, I identified that attitudes condoning violence against a partner are associated with IPV perpetration (e.g. Stith et al., 2004), but are often included as a risk factor by researchers without a sufficient explanation for why and how attitudes *cause* a person to perpetrate a specific act of violence. However, in adopting the theoretical framework of SAT, it can be posited that attitudes condoning violence against a partner contribute to a person's *perception* of IPV as an action alternative.

3.5.2 The Processes of Habitual and Deliberate Choice

> Attempting to understand human behavior as the outcome of rational cognition alone is not only incorrect – it leads to fundamental misunderstandings of the human condition
>
> (Massey, 2002, p. 2)

According to SAT, when a person perceives moral rule-breaking as an action alternative, a process of deliberate or habitual choice is activated (Wikström et al., 2012). Assimilating a process of choice into an analysis of action acknowledges the differential, situational nature of human behaviour (Wikström, 2014; Wikström & Treiber, 2016). The nature of the choice process that dominates criminological theory is that of *rational* (deliberate) choice (Treiber, 2014, 2017; Wikström, 2006; Wikström & Treiber, 2009). By contrast, SAT submits that both habitual and deliberate choice processes can guide human actions (e.g. Wikström et al., 2012). By integrating both habitual and deliberate choice, a framework such as SAT is able "to reconcile the role of deterministic and voluntaristic forces in the explanation of human action" (Wikström & Treiber, 2009, p. 77; see also, Treiber, 2017; Wikström, 2006), and presents a more realistic paradigm of human action in line with psychological and neurological evidence regarding the dual-processing quality of human decision-making (e.g. Bechara, 2004; Bechara, Damasio, & Damasio, 2000; Kahneman, 2011; Ouellette & Wood, 1998; Sloman, 1996; Treiber, 2011, 2014).

To make a choice is to form an intention to act (Wikström, 2006). Both habitual and deliberate (rational) choice processes lead to the forming of intention; however, the distinction between the two choice processes "is *how* the choice emerges" (Wikström, 2006, p. 79; emphasis in original). Rational choice is a deliberate form of decision-making. Rational choice corresponds with making the 'best' choice, and to make the 'best' choice, there must be at least two options to choose from, "because to choose the best alternative requires that the agent identify action alternatives from which to choose" (Wikström, 2006, p. 77). By contrast, habitual choice occurs when a person sees only one action alternative, and thus no process of deliberation occurs (Wikström & Treiber, 2016). If there is only one action alternative, a rational, deliberate decision-making process cannot occur – there is no 'best' choice of action alternatives, only *the* action alternative.[67]

[67] Habitual and deliberate choice are not always and necessarily mutually exclusive, yet "many [actions] will be predominantly habitual or deliberative" (Wikström, 2009, p. 254).

Within SAT's analytical framework, a process of deliberate choice is undertaken, and a moral judgement made, when a person encounters a novel circumstance, or when there is a conflict between the individual's personal morality and the moral context of the setting (Wikström, 2006, 2010a; Wikström et al., 2012; Wikström & Treiber, 2007). Conversely, habitual choice tends to be an automatic response to familiar stimuli, and does not require an individual to make a choice between alternative actions (Wikström, 2006; Wikström et al., 2012; Wikström & Treiber, 2007, 2009).

While habitual and deliberate choice represent different decision-making processes, it is prudent to recognise that habitual choices often develop out of a pattern of deliberate choices (Wikström, 2006). For example, the first few occasions that a person hits his or her intimate partner, the action choice may be the result of a deliberate decision-making process; yet, increasing familiarity with IPV as the action response to an instigating factor (such as anger) may lead to IPV becoming habitual (regarding instigating factors, see Chapter 4)

Habitual violence may also become generalised to a broad range of settings (Wikström & Treiber, 2009). For instance, a person who habitually uses violence within the context of the home may increasingly see and choose violence as the action alternative to motivating factors in other settings (such as an argument with a stranger in a pub), to the point that violence becomes generally habitual. The notion of generalised versus localised violent habits aligns with the broad distinction between partner-only, and generally violent IPV perpetrators reported by researchers who have developed and tested descriptive 'batterer' typologies (see e.g. Babcock, Miller, & Siard, 2003; Holtzworth-Munroe, Meehan, et al., 2000; Holtzworth-Munroe & Stuart, 1994; Saunders, 1992; Waltz, Babcock, Jacobson, & Gottman, 2000).[68] However, not all habitual IPV perpetrators develop generalised violent habits. As illustrated in the IPV typology literature cited, many habitual IPV perpetrators restrict their use of violence to their intimate partners (see also a review by Dixon & Browne, 2003), and evidence suggests that IPV does not necessarily translate from one relationship to another (e.g. Shortt et al., 2012; Whitaker, Le, & Niolon, 2010).

[68] To make sense of the observation that IPV men are a heterogeneous group, researchers have developed typologies based on a number of 'dimensions', most often: the severity of violence, the generality of violence, and the presence of psychopathology in the perpetrator (for a key example, see Holtzworth-Munroe & Stuart, 1994). While typologies can be useful in risk assessment and treatment (Dixon & Browne, 2003), they also have limitations. First, typologies are largely descriptive in nature (Babcock et al., 2004) and second, typologies (and categorisation systems generally) are criticised for their use of "rigid classification schemes" of complex human characteristics and behaviour (Dixon & Browne, 2003, p. 123).

The distinction between localised and generalised habitual violence may be indicative of differences in action-specific morality (see Chapter 2, Section 2.5.1). To see and choose violence in a particular context, a person must be guided by his or her morality. Individuals who habitually perpetrate IPV, but are otherwise non-violent, feasibly represent individuals with a weak IPV-specific morality, but a comparatively strong morality with regard to violence against non-partners. These individuals are likely to only habitually see and choose violence when their weak IPV-morality interacts with a weak moral context (e.g. the home). By contrast, individuals who habitually perpetrate IPV *and* violence against others, are likely to have a generally weak violence morality, and thus are likely to habitually see and choose violence when their weak violence morality interacts with a greater range of weak moral contexts.[69]

A final caveat is that habitual choice does not always occur in response to familiar stimuli. Wikström and Treiber (2009) suggest that habitual choice may also occur in novel situations where strong emotion (such as anger) over-rules a deliberate choice process, or where weak emotion concerning the breaking of moral rules (e.g. weak moral emotions regarding IPV) precludes the perception of more than one action alternative, thus rendering deliberate choice obsolete.[70]

3.5.3 Deliberate Choice and the Conditional Relevance of Controls

It is during the process of deliberate choice that internal and external sources of control become relevant in the SAT framework (e.g. Wikström et al., 2012; Wikström & Treiber, 2007). If a person does not perceive rule-breaking as an action alternative, or the person habitually sees and chooses rule-breaking as an action alternative, the role of internal and external controls is rendered obsolete because there is "nothing to control" (Wikström & Treiber, 2009, p. 88). It is only when a process of deliberate choice is activated that internal control (self-control) may help a person adhere to his or her rule-following morality, or external controls (deterrent features of the setting) may persuade a person with weak rule-following morality to adhere to the moral rules of the setting (Wikström, 2010a; Wikström et al., 2012; Wikström & Treiber, 2007). Thus, the relevance of controls depends upon a person engaging in a process of deliberate choice.

[69] Of course, people's moral habits can change (see Wikström & Treiber, 2009, in press).

[70] Relatedly, Wikström and Treiber (2009) make a subtle but significant distinction between reactive and impulsive aggression: reactive aggression is defined as being habitual aggression that occurs when a person's emotion overrides their perception of alternatives, while impulsive aggression occurs when a person deliberates between action alternatives, but "fails to exhibit self-control" (p. 90).

Within the following sub-sections I further describe SAT's characterisation of internal and external controls, and how SAT views the role of controls in the causation of crime. As I have noted previously, this thesis concentrates on the role of personal morality in explaining why people break moral rules prohibiting violence against a partner. Therefore, in describing the relevance of controls, I provide only an overview of the nature and role of controls in SAT.

3.5.3.1 Internal Control: The Role of Self-Control in Situational Action Theory

Low self-control, as characterised by Gottfredson and Hirschi (1990), is one of the most prominent explanations of criminal behaviour in the criminological literature (DeLisi & Vaughn, 2016; Pratt & Cullen, 2000; Vazsonyi, Mikuška, & Kelley, 2017). According to Gottfredson and Hirschi (1990), "people who lack self-control will tend to be impulsive, insensitive, physical… risk-taking, short-sighted, and nonverbal" (p. 90). The traditional self-control thesis in criminology posits that low levels of self-control correspond with an increased likelihood of criminal behaviour, while a high level of self-control reduces the likelihood that a person will engage in crime (Gottfredson & Hirschi, 1990).

Similarly, low self-control has gained prominence as an important explanatory variable in psychological models of, and empirical research into, the causes of aggression and violence (Bettencourt, Talley, Benjamin, & Valentine, 2006; Denson, DeWall, & Finkel, 2012; Dewall, Anderson, & Bushman, 2011; DeWall, Baumeister, Stillman, & Gailliot, 2007; Finkel & Eckhardt, 2013). For instance, according to the social-cognitive general aggression model (GAM), the majority of people are not violent (even if they would likely get away with it) because of self-regulatory processes (C. A. Anderson & Bushman, 2002). Therefore, while there may be numerous instigators of aggression and violence (such as anger and frustration), self-control is posited to be pivotal to understanding how such instigators can be controlled (Baumeister & Boden, 1998; DeWall et al., 2007). Accordingly, where self-control mechanisms fail, impulses are more likely to prevail and aggression to occur; thus, Baumeister and colleagues have suggested that low self-control (or a failure in self-control) is the "proximal cause of violence" (DeWall et al., 2007) (p. 63).

Likewise, a diminished ability to exercise self-control has been posited as a key variable in why people perpetrate acts of family violence more generally (Finkenauer et al., 2015) and partner violence specifically (see in particular, Finkel, 2007, 2008, 2014; Finkel & Campbell, 2001; Finkel

et al., 2009; Finkel & Eckhardt, 2013). Manifestations of low self-control, such as impulsivity[71] and/or a poor ability to control emotion, have also been identified as relevant individual-level traits of IPV perpetrators (Archer, Fernández-Fuertes, & Thanzami, 2010; Bates et al., 2016; Hershorn & Rosenbaum, 1991; Holtzworth-Munroe, Meehan, et al., 2000; Murphy, Taft, & Eckhardt, 2007; Schafer, Caetano, & Cunradi, 2004; Shorey, Brasfield, Febres, & Stuart, 2011; Stuart & Holtzworth-Munroe, 2005).

SAT agrees with Gottfredson and Hirschi (and others generally) that self-control is important in determining whether crime (moral rule-breaking) occurs, but provides an alternative argument regarding how and when self-control plays a role in crime causation. First, the SAT framework regards the ability to exercise self-control as being both the product of stable neurological processes that comprise a person's baseline executive functioning capabilities, *and* transient factors that can temporarily alter a person's executive functioning capabilities (Treiber, 2014; Wikström, 2014; Wikström & Treiber, 2007). Transient factors, such as alcohol consumption or stress, can impede or deplete a person's ability to exercise self-control (see e.g. Baumeister & Heatherton, 1996; Finkel, 2014). In line with evidence of the dynamic nature of self-control, Wikström and Treiber (2007) submit that "an individual's ability to exercise self-control is an outcome of the *interaction* between his/her *executive capabilities* (an individual trait) and the *settings* in which he/she takes part (his/her environment)" (p. 238, emphasis in original). As such, SAT counters the characterisation of self-control asserted by Gottfredson and Hirschi (1990), namely that self-control is a static personality trait, and redefines it as a dynamic and situationally determined construct (Wikström & Treiber, 2007).

Second, Wikström and Treiber (2007) make the case that while self-control is relevant to explaining crime, it is not adequate in and of itself. Rather, as I have noted, a core supposition of SAT is that controls (internal and external) only become relevant factors in whether crime (rule-breaking) occurs during the process of deliberate choice; this is defined as the 'principle of the conditional relevance of controls' (e.g. Wikström, 2010a; Wikström et al., 2012; Wikström & Treiber, 2007). Thus, self-control is only pertinent when there is a "conflict" between a person's morality and the moral rules of the setting (Wikström et al., 2012; Wikström & Treiber, 2007, p. 246-247). In such cases, the person's ability to exercise self-control will determine whether

[71] De Ridder and colleagues (2012) clarify that while impulsivity is often considered a proxy for low self-control, impulsivity refers to the strength of impulses, while self-control refers to the ability to constrain such impulses.

adherence to rule-following morality is achieved (Wikström et al., 2012). For example, where a person's morality is not so strong as to *not* perceive IPV as an action alternative, and is also not so weak that he or she habitually (automatically) perceives IPV as an action alternative, a process of deliberate choice will likely occur. In such instances the person chooses to either adhere to his or her moral rules that it is wrong to hit a partner and chooses a non-violent action alternative (exercises self-control), or does not adhere to his or her moral rules and hits his or her partner (fails to exercise self-control).[72]

3.4.4.2 External Controls: The Role of Deterrence in Situational Action Theory

SAT's position on the role of deterrence in people's adherence to the law differs to that found in traditional criminological deterrence theory. Deterrence theory is grounded classical criminology and the utilitarian view that humans seek pleasure and avoid pain (Akers, 1990; Nagin & Pogarsky, 2001; Pratt, Cullen, Blevins, Daigle, & Madensen, 2006).[73] From this classical perspective, individuals refrain from breaking the law because they wish to avoid the negative consequences of law breaking (i.e. punishment); equally, individuals break the law because "the benefits outweigh the costs" of crime (Pratt, Cullen, Blevins, Daigle, & Madensen, 2006, p. 367). Thus, within the field of criminal justice, deterrence may be understood as "a strategy of seeking to induce compliance through the instrumental reason of the potential offender's wishing to avoid the penalty" (von Hirsch, Bottoms, Burney, & Wikström, 1999, p. 4). While deterrence theory has enjoyed a long period of popularity (Nagin, 1998; von Hirsch et al., 1999), a meta-analysis by Pratt and colleagues (2006) of the relationship between deterrence theory variables (e.g. measures of the certainty and severity of punishment, and the personal costs of crime, such as loss of employment or breakdown of a relationship) and crime, reports consistently small effect sizes. The authors conclude by qualifying that their argument is not that deterrence is unrelated to crime prevention, but that deterrence is only "one piece in in a much larger theoretical puzzle predicting crime and deviance" (Pratt et al., 2006, p. 386).

For SAT, the principal reason that an individual follows a particular moral rule is because he or she believes it is wrong to break the moral rule. Within the framework of SAT, deterrence only

[72] Empirical evidence in support of SAT's 'principle of the conditional relevance of controls' has been reported by a number of researchers (see e.g. Hirtenlehner & Hardie, 2016; Svensson, 2015; Svensson et al., 2010; Wikström & Svensson, 2010).
[73] See Beccaria (1963 [1764]) and Bentham (1970 [1789]).

becomes relevant during a process of deliberate choice when, as a result of weak morality, the individual has perceived rule-breaking, such as violence against a partner, as an action alternative (Wikström et al., 2012; Wikström & Treiber, 2007). It is during such circumstances that external controls may deter a person from committing an act of moral rule-breaking (Wikström & Treiber, 2007). Thus, for SAT, deterrence is only relevant for individuals who perceive moral rule-breaking as an action alternative and engage in a deliberate choice process (Wikström, 2006; Wikström, Tseloni, & Karlis, 2011).[74]

External controls take the form of external factors, such as CCTV cameras or the presence of a police officer, that deter people from breaking the formal or informal moral rules of the setting or wider society (Wikström et al., 2012; see also Chapter 2). The level of deterrence in a setting is determined by the level to which the law is enforced, namely how well enforced the moral rules are, and the level of monitoring present (e.g. police presence, or the presence members of the public) (Wikström et al., 2012). For example, the home may be considered a context in which the level of deterrence for IPV perpetration is low: it is a setting that is weakly monitored by official third parties (i.e. police officers), or other adult third parties who may deter a potential IPV perpetrator.

In addition to understanding deterrence as the environmental features of settings and their level of enforcement, it is also important to recognise that the effectiveness of external controls is determined by individual deterrence sensitivity (Wikström et al., 2011). External controls will only be effective if people perceive and care about their presence (Wikström, 2010a; Wikström et al., 2012; Wikström & Treiber, 2007). Moreover, SAT submits that deterrence sensitivity is most relevant for those with weak rather than strong morality (Wikström et al., 2011). For example, a potential IPV perpetrator (i.e. a person with weak IPV morality) is more likely to refrain from an act of violence if he or she perceive the risk that they will be caught and punished to be high.[75]

Taken together, both internal and external controls contribute to understanding why and how people are moved to commit acts of moral rule-breaking in SAT. However, the relevance of these

[74] SAT makes the distinction between the situational role of deterrence in crime causation, and the developmental influence that experiencing deterrence can have on crime propensity (Wikström et al., 2011). Within this section I focus on the influence of deterrence on rule-breaking actions. Regarding deterrence in SAT, see Wikström (2007a).

[75] Regarding SAT's proposition regarding the conditional relevance of deterrence sensitivity, empirical support is reported in Svensson (2015) and Wikström et al. (2011), namely for individuals with weak morality, those who had high deterrence sensitivity were less likely to engage in crime than those with lower deterrence sensitivity. However, a study by Pauwels, Weerman, Bruinsma, and Bernasco (2011) found that individuals with *strong* morality had higher deterrence sensitivity than those with weak morality.

controls is conditional: controls are *only* relevant *if* a person engages in a process of deliberate choice, and a person only engages in deliberate choice *if* the moral filter guides his/ or her perception towards moral rule-breaking as an action alternative (Wikström & Treiber, 2007). Moreover, if a person's morality is sufficiently weak, then he or she will *automatically* perceive moral rule-breaking as an action alternative, and the role of controls becomes obsolete (Wikström & Treiber, 2007, 2009). Thus, the moral filter is arguably the most significant component of the perception-choice process, and personal morality is considered "the most important individual characteristic influencing an individual's engagement in acts of crime" (Wikström & Treiber, 2007, p. 258). Accordingly, it is the role of personal morality, specifically, IPV morality, in the explanation of IPV perpetration that is the focus of this thesis. It is hypothesised that IPV morality plays a pivotal role in influencing individuals' engagement in IPV actions by guiding their perception of action alternatives: individuals with weak IPV morality are more likely to perceive IPV as an action alternative and thus perpetrate more acts of IPV than those with strong IPV morality.

Finally, Figure 3.2 provides a depiction and visual summary of the full perception-choice process in SAT.

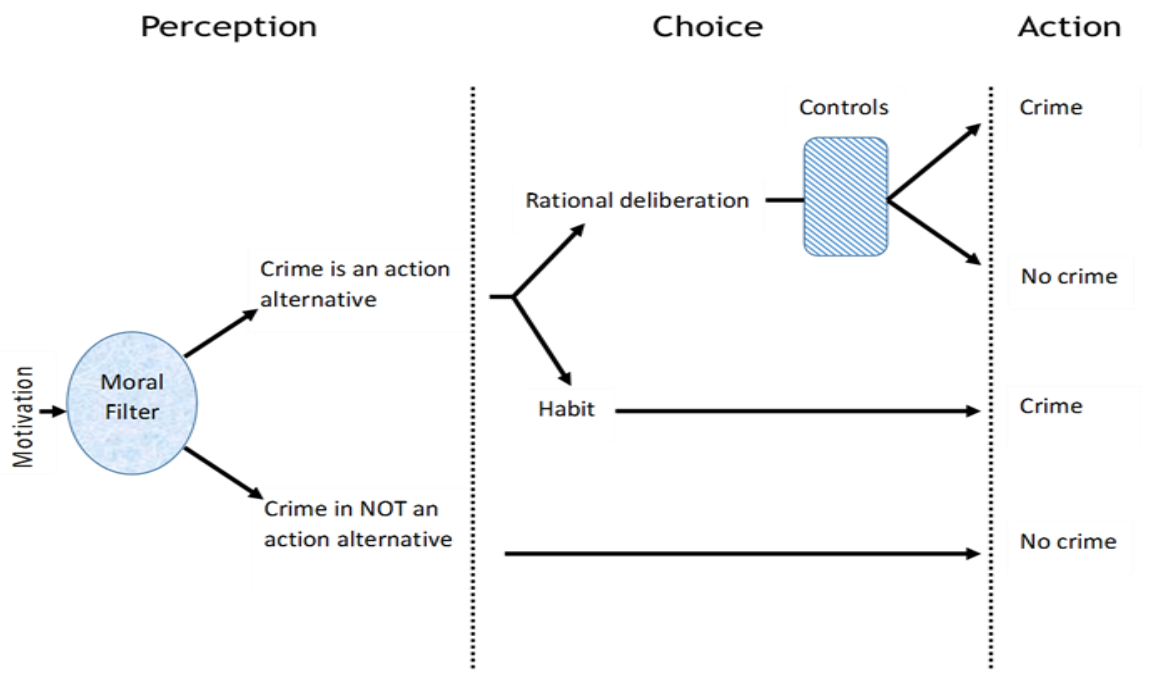

Figure 3.2. The perception-choice process

Adapted from: Wikström, P.-O. H. (2011), Does everything matter? Addressing the problem of causation and explanation in the study of crime. In J. M. McGloin, C. J. Sullivan, and L. W. Kennedy (eds). When crime appears: The role of emergence. London: Routledge.

3.6 Does Male and Female Perpetrated Crime Require Separate Causal Explanations?

Having provided a detailed description of the causal mechanism (i.e. the perception-choice process) in SAT, in this final section, I provide an overview of how SAT navigates the issue of gender and crime, and how this approach can be applied to the study of IPV as moral rule-breaking.

In Chapter 1, I made clear that within this thesis I adopt both a gender-inclusive definition of IPV, and a gender-inclusive theoretical approach. My aim is to present a model of how IPV can be explained as moral rule-breaking irrespective of the gender or sexual orientation of the perpetrator and victim. The rationale for the gender-inclusive approach taken within this thesis is not intended to reflect an ideological position; rather, the rationale reflects the position taken by SAT on the roles of biological sex and gender in the causes of crime.

In Chapter 1, I introduced the longstanding and highly polemic gender debate that exists within the IPV literature, which refers to whether IPV is a predominantly male or female perpetrated

phenomenon (e.g. Straus, 1999). The position taken on the gender debate by IPV scholars subsequently underlies the characterisation of IPV that is adopted, and the theoretical lens through which the causes of IPV are examined (McHugh, Livingston, & Ford, 2005; Winstok, 2007, 2013). For instance, some researchers contend that gendered explanations of IPV are necessary (e.g. Bookwala, Frieze, Smith, & Ryan, 1992; Dobash et al., 1992; Foo & Margolin, 1995; Mennicke & Wilke, 2015). By contrast, other scholars argue that the causes of male and female IPV are the same and that a more general violence perspective should be applied (Bates et al., 2016; Dutton & Nicholls, 2005; R. B. Felson, 2002, 2006).

A gender debate of the magnitude and type found within the IPV literature does not exist within the literature on general crimes rates: it is widely accepted that men more often perpetrate crime than women do (DeLisi & Vaughn, 2016; Hirtenlehner & Treiber, 2017; Weerman, Bernasco, Bruinsma, & Pauwels, 2015). However, this consistent finding has led to a different debate: can male-perpetrated crime and female-perpetrated crime be explained within the same theoretical framework, and if so, how? (Weerman et al., 2015). While criminological theories tend to be non-gender specific, most "have been developed with male offenders in mind but assume that the causes of offending are the same for males and females" (Hirtenlehner & Treiber, 2017, p. 166). However, the extent to which theories of crime can be applied equally well to males and females has been questioned (Daly & Chesney-Lind, 1988; Klein, 1973; Simpson, 1989).

According to SAT, separate theories of male and female moral rule-breaking are not necessary. Attributes such as biological sex "cannot be causes" of crime, likewise, a person's gender, as defined as a social construction, does not cause crime (Wikström, 2011, p. 54). This is not to say that being male or female (whether that refers to the biological categorisation of sex, or the social construction of gender) is unrelated to the causes of behavioural actions, such as acts of crime. Rather, attributes, such as biological sex, represent "makers or symptoms" that are distally, rather than proximately relevant to the perception-choice process (Wikström, 2011, p. 54).

From a biological perspective, whether a person is male or female may influence how he or she will "respond to different experiences" (Hirtenlehner & Treiber, 2017, p. 169). Likewise, being male or female may reflect the socialisation processes that a person is exposed to (e.g. moral norms that encourage or are accepting of partner violence), which in turn may contribute to the development of rule-breaking propensity (e.g. weak IPV morality) and exposure to weak moral contexts (Wikström, 2017; Wikström & Treiber, in press). Yet, biological characteristics and

socialisation processes do not directly move a person to action, instead, they contribute indirectly (via processes of personal and social emergence; see the social model in Section 3.3) to the situational mechanism that *directly* moves a person to commit a rule-breaking action: the perception-choice process (Hirtenlehner & Treiber, 2017; Wikström, 2011, 2017).

Thus, according to the assumptions of SAT, all moral rule-breaking actions can be explained by the perception-choice process: a person breaks moral rules because he or she perceives and chooses (habitually or deliberately) to do so, which is the result of the (situational) interaction between a person's personal morality and ability to exercise self-control, and the moral context of the setting (Wikström et al., 2012). This process applies to the explanation of moral rule-breaking regardless of whether the rule-breaking individual is male or female (Hirtenlehner & Treiber, 2017). While few studies have directly tested whether the core framework of SAT can be generalised to explain both male and female moral rule-breaking, initial studies by Hirtenlehner and Treiber (2017) and Weerman and colleagues (2015) have yielded broad support for the supposition that the perception-choice process is the mechanism that underlies both male and female moral rule-breaking actions.

It follows that according to the assumptions of SAT, it should be possible to explain both male and female IPV actions as the result of the perception-choice process. This thesis partially tests this assumption by examining whether the role (influence) of morality holds when explaining male and female IPV perpetration. Accordingly, two hypotheses can be put forward:

1. Weak IPV morality will contribute to the explanation of both male and female IPV perpetration.
2. If there is a gender gap (i.e. gender asymmetry) in IPV perpetration, this will be reflected by differences in IPV morality strength between males and females. More specifically, if more males perpetrate IPV than females, this will be reflected by more males than females having weak IPV morality. Conversely, if more females than males perpetrate IPV, this will be reflected by more females than males having weak IPV morality.

3.7 Causal Process: Summary

SAT was developed by Wikström in response to the theoretical and empirical fragmentation that plagues criminology, and the hindrance that such fragmentation has had on progress towards an adequate understanding of the causes of crime (Wikström, 2004). Wikström (e.g. 2004, 2010,

2011) submits that one of the primary sources of the fragmentation is the accumulation of variables that are correlated with crime, but the absence of theories that posit causal mechanisms to explain how and why such variables cause a person to commit an act of crime. Likewise, in this chapter I have noted that many of the deficiencies of criminological theory identified by Wikström, particularly the neglect of causal mechanisms, are present in the IPV literature.

In this chapter I have provided a detailed account of the principles that underlie SAT's analytical approach to studying the causes of crime, and described the causal mechanism central to SAT's explanation of how people are moved to commit acts of moral rule-breaking (the perception-choice process). In doing so I drew upon relevant examples from the IPV literature to illustrate how the perception-choice process may be applied to analysing IPV as moral rule-breaking. Finally, I described how the causal mechanism in SAT can be applied to explain both male and female moral rule-breaking, and hypothesised how this assumption can be tested in relation to the study of IPV in this thesis.

4: The Role of Motivation in Situational Action Theory

This chapter is the last chapter of Part 2 of this thesis, the aim of which has been to delineate the theoretical assumptions and framework of the thesis, and to illustrate how intimate partner violence (IPV) can be explained within a theory of moral rule-breaking. Up to this point, I have defined the nature and role of morality in situational action theory (SAT), and explained how acts of crime can be defined and thus analysed as acts of moral rule-breaking. In doing so, I have made the case that SAT is a suitable framework within which to understand the causes of IPV. In the previous chapter, I detailed the causal mechanism that is central to the explanation of moral rule-breaking in SAT. In this chapter I address the *motivation* process in SAT, namely the process that *instigates* the causal process.

Wikström and colleagues (2012) contend that in order to understand the causes of criminal (rule-breaking) actions, it is necessary to understand how the causal process is activated. Yet, the role of motivation is frequently neglected in criminological theories of crime (Treiber, 2017; Wikström et al., 2012; Wikström & Treiber, 2016). I begin Chapter 4 by highlighting the neglect of motivation in criminological theories of crime, before providing an overview of the motivation process in SAT, and the two classes of motivation specified within the framework: temptations and provocations.

Drawing on theoretical and empirical knowledge of the relationship between provocation and violence generally, and IPV specifically, Chapter 4 concentrates on provocation as the motivation for IPV. I describe the components of the provocation process in SAT, and illustrate how relevant correlates of IPV perpetration align with the constructs that comprise provocation. In doing so, I propose a framework of IPV motivation, and define how the motivation and causal processes are proposed to work together in order to explain how and why a person is moved to commit an act of violence against a partner. Finally, I specify testable hypotheses that will be addressed in Part 3 of this thesis, and highlight the novel contributions of the chapter to both SAT and IPV literatures.

4.1 The Neglect of Motivation in Theories of Crime

> A causal mechanism is of course one activated by events (causes) of a certain kind
>
> (M. Bunge, 1997, p. 438)

> The apparent impossibility to say when a mechanism will be triggered is the result of not including an important initial condition in its formulation. A virus cannot start an epidemic in a fully immunized population; nor is a spark enough to trigger an explosion – the powder must also be dry
>
> (Mayntz, 2004, p. 245)

Wikström and colleagues (2012) contend that the process of motivation is a necessary component of an explanatory framework of crime (moral rule-breaking): in order to fully understand the causes of crime, we must also understand how the causal process is instigated. By contrast, the role of motivation in other prominent theories of crime is poorly developed, or neglected altogether (Higgins & Ricketts, 2004; Treiber, 2017; Wikström & Treiber, 2016). Theories of crime that are grounded in Benthamian principles of human nature (i.e. the classical school of criminology) tend to neglect the issue of motivation (Sellers, 1999). More specifically, Wikström and colleagues (Treiber, 2017; Wikström & Treiber, 2016) have observed that control theories (namely social control theory [Hirschi, 1969], and self-control theory [Gottfredson & Hirschi, 1990]) assume that we are all equally motivated to commit crime; while opportunity theories (namely routine activity theory [e.g. L. E. Cohen & Felson, 1979], and rational choice theory [e.g. Cornish & Clarke, 2008]) tend to side-step the need to address how people become motivated, the point of departure being the already motivated offender.

At first consideration, an exception to the argument that theories of crime neglect motivation could be general strain theory (GST; Agnew, 1985, 1992). Agnew's theory positions motivation at the heart of its explanation of crime (Agnew, 1992). Indeed, the import ascribed to motivational processes by GST is considered central to what distinguishes GST from many other criminological theories (Agnew, 1995a, 2006). Perhaps the most obvious example of this distinction comes from

contrasting GST with control theories: where GST argues that individuals are "*pressured into crime*" control theories contend that the absence of controls (social or individual) "*frees people to engage in crime*" (Agnew, 2006, p. 23, emphasis in original). The notable distinction being that control theories consider people to be equally motivated to engage in crime (e.g. Hirschi, 1969), while GST considers motivation to differ between and within individuals, and must be generated (Agnew, 1993, 1995b).[76]

The central argument of GST is that experiencing strain evokes negative emotion (particularly anger), and the negative emotion generates a "pressure for corrective action, with crime being one method of coping" (Agnew, 2013, p. 654). Agnew (2006) suggests that negative emotionality can be both the product of strain, but also increase individual sensitivity to strains (see also, Agnew, 1992, 1995b; Agnew, Brezina, Wright, & Cullen, 2002). Agnew (Agnew, 1992, 1995b) has also argued that GST is principally 'situational': "Strain theory focuses on the production of motivated offenders: arguing that certain provocative situations may turn individuals into motivated offenders … So strain theory also sheds light on those situational events that lead predisposed individuals to engage in crime" (Agnew, 1995b, p. 126).

However, in restricting the motivation for crime to negative affect (particularly anger), GST neglects to account for the fact that people commit acts of crime for reasons other than the experience of strain and the negative affect that strains may generate (Wikström, 2010a). Indeed, crime may occur because of a distinct lack of strain and/or lack of emotion (e.g. Wikström & Treiber, 2009). To this point, the results of a number studies testing the suppositions of GST suggest that anger mediates the relationship between strain and aggressive behaviour, but does not mediate the relationship between strain and non-aggressive criminal behaviour (Aseltine, Gore, & Gordon, 2000; Capowich, George, Mazerolle, & Piquero, 2001; Mazerolle, Piquero, & Capowich, 2003). Indeed, Agnew (2013) has posited that anger may be particularly relevant in violent crime, but less pertinent to the explanation of other crime types such as theft or drug offences.

Notwithstanding the limited concept of motivation in GST, the theory recognises the differential nature of motivation: in order for a person to commit a crime, he or she must *become* motivated. However, the production of a motivated offender does not provide a sufficient explanation for why the offender commits an act of crime: there are many people who experience strain and resultant negative affect, but who do not perpetrate acts of crime. To this point, Agnew has suggested that

[76] Furthermore, Agnew (1990) suggests that a criminal propensity needs to be activated.

people's responses to the negative affect experienced from to strain are influenced by a number of 'coping strategies' (Agnew, 1992, p. 66-74). Thus, the truly causal process (i.e. what leads a person to commit a crime) is more likely to be found within this part of the theory. Yet, the number of potential coping strategies, and factors that are posited to influence a person's ability to cope with the strain-negative affect experience suggested by Agnew are numerous (see Agnew, 1992, 2013; Agnew et al., 2002). To this point, Wikström (2010a) observes that "the key 'explanation' [of crime in GST] appears to turn into one of cumulative risk" (p. 225). Moreover, Wikström (2010a) submits that GST "suffers analytically because there is no detailed analysis and specification of *how* poor coping skills and resources turn negative emotions into acts of crime" (p. 225).

Thus, GST and SAT are compatible in their assumptions regarding motivation, namely that people must *become* motivated to break the law. However, the lack of specificity in GST, with regard to the *causal* process, arguably results in GST being more aptly referred to as a predictive rather than an explanatory framework of crime. Furthermore, GST is most appropriate for explaining violent crime, and thus is rather limited as a general theory of crime. By contrast, the SAT framework sets out *how* a person becomes motivated and *how* a motivated person may or may not be moved to respond to the motivation with crime (moral rule-breaking actions). Moreover, SAT is not limited to explaining emotionally motivated crime. The SAT framework presents two classes of motivation: provocations and temptations, which are considered to be "some of the most, if not *the* most, important classes of motivators in moral action" (Wikström & Treiber, 2009, p. 80-81). In the next section, I provide an overview of the motivation process in the SAT framework.

4.2 Motivation in Situational Action Theory: An Overview

According to Wikström and colleagues, motivation is defined as "goal-directed attention" (Wikström et al., 2012, p. 23). The actions that lead to the commission of a crime are a type of goal-directed behaviour (Wikström, 2006), and thus motivation is the process that instigates the causal mechanism (the perception-choice process) that leads to goal-directed behaviour. As such, motivation is a necessary instigator of action, but motivation is not a cause of action (Wikström et al., 2012). For example, the emotion of anger may motivate an act of IPV, but the intention to commit an act of IPV is formed as the result of the (causal) perception-choice process. It follows that within SAT's situational model of rule-breaking action, motivation and cause are two distinct

but interlinked processes, and both are necessary to explain and understand how a person is moved to action (Wikström, 2006, 2014; Wikström, et al., 2012).

Within the SAT framework the process of motivation is clearly distinguished from the causal process (the perception-choice process), and a clear framework for how a person becomes motivated is provided. It is pertinent to note that the process of motivation is part of the situational model of SAT, and accordingly, the process of motivation is regarded as the outcome of a person-environment interaction (Wikström et al., 2012). Specifically, motivation is posited to arise from the intersection of individual level characteristics (desires, needs, commitments, sensitivities) and features of the immediate setting (particular opportunities or frictions) (Wikström, 2006; Wikström & Treiber, 2016).[77] It follows that motivation is considered to be differential: individuals become motivated rather than being in a constant state of motivation; individuals will interpret and respond to the same features of the setting in different ways; and the same person may become motivated in response to a feature of the setting in one context but not in another (Treiber, 2017).

There are numerous motivations (reasons) that a person may commit a particular act of crime, likewise, different people will have different motivations for committing the same type of crime (Wikström et al., 2012; Wikström & Treiber, 2009). To this point, SAT does not attempt to match a particular motivation to a particular crime, but rather submits that the causal process leading to rule-breaking actions may be activated by the experience of provocation or the experience of temptation (Wikström et al., 2012; Wikström & Treiber, 2016). Temptation is thought to arise when a person with particular desires or commitments is faced with an opportunity to satisfy the desire or fulfil the commitment (Wikström et al., 2012). By contrast, provocation refers to the

[77] This position is congruent with the general, psychological, framework of motivation presented by Heckhausen and Heckhausen (2008). Within the psychology of motivation, it is acknowledged that motivation arises from a person (his or her traits) interacting with the features of his or her environment (Heckhausen & Heckhausen, 2008; Scheffer & Heckhausen, 2008). Yet theories in motivational psychology have tended to concentrate on individual traits *or* 'situational' factors (note that this is not the same use of 'situational' as found in SAT) (Heckhausen & Heckhausen, 2008). Individual trait theories of motivation have been developed to explain individual differences in responses to external stimuli, and accordingly, intra-individual stability in responses to external stimuli (Scheffer & Heckhausen, 2008). By contrast, 'situational' models of motivation concentrate on the features and opportunities of settings (the stimuli) and how people respond to them (Heckhausen & Heckhausen, 2008). 'Situational' models include stimulus response models grounded in behaviourism and more contemporary cognitive theories that concentrate on how people process and appraise information from the immediate environment in order to become motivated (Beckman & Heckhausen, 2008; Heckhausen & Heckhausen, 2008). However, Beckman and Heckhausen (2008) observe that by themselves, trait-based and situation-based theories of motivation do "little justice to the complexity of motivational processes" (p. 97).

experience of anger, which may arise when a person faces an external friction (Wikstrom and Treiber, 2009).

Having provided an overview of the core suppositions that underlie the process of motivation in SAT, the remaining sections of the chapter will provide a more detailed exposition of the motivation process that is the focus of this thesis: provocation. In the subsequent sections, I delineate the components of the provocation process, drawing on pertinent anger and emotion literature, and illustrate how the provocation process in SAT can be applied to existing knowledge about the role of anger and conflict in IPV.

4.3 The Process of Provocation in Situational Action Theory: An Application to Intimate Partner Violence

Anger is commonly associated with violence (Berkowitz & Harmon-Jones, 2004; Howells, 2004), particularly in criminal and psychiatric populations (Douglas & Skeem, 2005; Howells, 2004; Loza & Loza-Fanous, 1999; Novaco, 1994, 1997, 2011; Ohlsson & Ireland, 2011). Similarly, aggression is often considered an observable measure of anger and hostility (Averill, 1983; Eckhardt, Barbour, & Stuart, 1997). It follows that anger (and closely related constructs such as hostility and frustration) feature in a number of psychological theories of aggression and violence. For example, the frustration-aggression hypothesis (Dollard, Miller, Doob, Mower, & Sears, 1939), the cognitive neoassociation model of aggression (e.g. Berkowitz, 1989, 1990, 1993), Bandura's social learning theory of aggression (Bandura, 1983), and the general aggression model (C. A. Anderson & Bushman, 2002).

Similarly, research that has examined the relationship between anger and IPV perpetration has found that IPV perpetrators tend to score more highly on measures of anger experience and expression than non-IPV perpetrators (e.g. Birkley & Eckhardt, 2015). In seeking to understand the antecedents of IPV incidents, research indicates that conflicts and arguments frequently instigate violence (e.g. Straus et al., 2006 [1980]), and IPV perpetrators often cite anger and jealousy as the motivation for using violence against a partner (e.g. Langhinrichsen-Rohling, McCullars, & Misra, 2012). While the experience of anger does not necessarily lead to violence, nor is anger required for violence to occur (Novaco & Welsh, 1989), there is compelling evidence

that anger and conflict (i.e. provocations) are common antecedents of IPV perpetration.[78] Accordingly, in this thesis I concentrate on provocation, rather than temptation, as the instigator of IPV.[79]

4.3.1 Provocation: The Experience of Anger

Within SAT, provocation is represented by the experience of negative affect, specifically anger (Wikström, 2006, 2014; Wikström et al., 2012; Wikström & Treiber, 2009)**.** Anger may be defined as "an emotional state that consists of feelings that vary in intensity, from mild irritation or annoyance to fury and rage" (Spielberger, Jacobs, Russell, & Crane, 1983, p. 162). Moreover, it is pertinent to recognise that the experience of angry emotion is transient, namely it is the temporary and subjective feeling of "tension, annoyance, irritation, fury and rage, with concomitant activation or arousal of the autonomic nervous system" (Spielberger et al., 1983, p. 169). However, it should be noted that the experience of anger also involves physiological and behavioural reactions, and cognitive processes (Berkowitz & Harmon-Jones, 2004; Eckhardt, Norlander, & Deffenbacher, 2004).[80]

Notwithstanding the caveat that anger does not *necessarily* lead to violence, the experience of anger is recognised as a frequent instigator of violence (e.g. Novaco & Welsh, 1989). It follows that research investigating the motivations for IPV perpetration has found that anger is an oft-cited reason for partner violence. For instance, a qualitative review by Langhinrichsen-Rohling and

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[78] Despite the evidence that anger and conflict are frequent antecedents of IPV, some scholars have raised objections to research or behavioural interventions that focus on anger (see in particular, Gondolf, 2007; Gondolf & Russell, 1986; Pence & Paymar, 1993). The crux of the argument against examining the role of anger in IPV perpetration is that it diverts blame and responsibility away from the perpetrator and towards the victim (Gondolf & Russell, 1986; Tolman & Saunders, 1988). Moreover, it is argued that allowing anger to be acknowledged as a motivator for violence against a partner draws focus towards the psychological processes that underlie behaviour, and diverts attention away from the feminist argument that the root cause of IPV is grounded in patriarchal social structures and ideologies that foster a sense of male entitlement (Gondolf & Russell, 1986; Healey, Smith, & O'Sullivan, 1998; McMahon & Pence, 1996; Pence, 1999; Pence & Paymar, 1993). However, other IPV scholars have been highly critical of the argument against the role of anger in IPV, in particular, Dutton and Corvo (2006) write that such an approach "is simplistic and fails to capture the true complexity of the human intimate relationship" (p. 477).

[79] However, this should not be taken to mean that temptation is disregarded as a viable motivation for IPV perpetration.

[80] In defining anger, it is also prudent to make clear the distinction between anger and hostility, which are often conflated (Birkley & Eckhardt, 2015; Deffenbacher et al., 1996; Norlander & Eckhardt, 2005; Novaco, 2011; Spielberger et al., 1983; Spielberger & Reheiser, 2009). As described, anger is an emotional state; however, hostility is more accurately defined as a negative attitude towards others (e.g. Berkowitz, 1993; Eckhardt et al., 2004; Spielberger et al., 1983). It follows that hostility is thought to contribute to an increased tendency to experience anger and to engage in violent behaviour (Eckhardt et al. 1997; Eckhardt et al., 2004). However, the focus of this thesis is anger, not hostility. Therefore, throughout this section I concentrate on theoretical and empirical literature that refers to anger, or clearly distinguishes between anger and hostility.

colleagues (2012) found that the expression of anger was a frequently reported motivation for using violence against a partner by male and female perpetrators. Studies of university samples have consistently found that both males and females cite anger as one of the principal reasons for IPV (Cate, Henton, Koval, Christopher, & Lloyd, 1982; Follingstad et al., 1991; Harned, 2001; Hettrich & O'Leary, 2007). Interestingly, some studies that have specifically compared male and female motivations for IPV have found that anger is cited more often by females than males (Elmquist et al., 2016; Follingstad et al., 1991; Harned, 2001).[81]

Concentrating on women's motivations for IPV, a systematic review by Bair-Merritt and colleagues (2010) found that anger at being ignored by a partner was a key motivating factor for female-perpetrated IPV; however, self-defence and retaliatory or anticipatory violence were also identified as frequent motivations. Similarly, Stuart and colleagues (2006) examined the motivations for IPV in a sample of women who were attending a treatment programme following arrest for IPV related offences, and found that the expression of anger, feeling provoked, and the expression of jealousy were equally frequent reasons for IPV reported by the women. However, it should be noted that as well as high levels of IPV perpetration, the women studied by Stuart and colleagues (2006) also reported high levels of IPV victimisation.

Studies with individuals arrested for IPV related offences have also found that anger is a frequently reported reason for IPV. For example, a study by Hamberger, Lohr, Bonge, and Tolin (1997) found that both males and females reported anger as a motivation for their violence against a partner; however, females were more likely than males to report motivations that were categorised as self-defensive or retaliatory. In a more recent study, Elmquist and colleagues (2014) found that both men and women reported that the expression of negative emotion, which included anger and stress, was a key reason for perpetrating acts of violence against a partner.

Thus, while acknowledging that anger is not the only motivation for IPV perpetration, it cannot be ignored that the experience of anger is a frequent instigator of both male and female IPV perpetration. However, what is the context of the anger experience that precedes IPV?

[81] The review carried out by Langhinrichsen-Rohling and colleagues (2012) identified a number of consistent categories of motivation for IPV: power and control, negative emotion, jealousy, communication, retaliation, and self-defence. Likewise, the studies cited in this section also found that anger was only one motivation for IPV reported by participants. Accordingly, it is recognised that a range of themes emerge when examining the motivations cited by individuals for their use of violence against a partner. Nevertheless, anger remains one of the most common motivations for IPV perpetration.

Research suggests that anger experience and expression towards a partner often occurs within the context of partner conflicts, which can subsequently result in physical IPV (Crane & Testa, 2014). Partner conflicts, namely conflicting interests and disagreements, are a frequent occurrence in intimate relationships (R. B. Felson & Outlaw, 2007), indeed, family conflict theory regards conflict as a 'normal' part of family and intimate relationships (Gelles & Straus, 1979; Straus, 1979; Straus et al., 2006 [1980]).

While conflict does not necessarily manifest as verbal arguments, nor does it necessarily instigate violence, conflicts can become "emotionally charged" and prompt aggressive or violent behaviour (Winstok, 2008, p. 288). Certainly, reviews have consistently found that partner conflict and IPV are positively associated (Hotaling & Sugarman, 1986, 1990; Schumacher et al., 2001; Stith et al., 2004), and researchers have observed that IPV is often preceded by conflict (Cascardi & Vivian, 1995; Dobash & Dobash, 1984; Dobash, Dobash, Cavanagh, & Medina-Ariza, 2007; Jacobson et al., 1994; Mooney, 2000; Neidig, Friedman, & Collins, 1986; Steinmetz, 1978; Straus et al., 2006 [1980]). Michael Johnson has also suggested that IPV instigated by disputes and negative emotion is the most common type of partner violence, and is the violence most often reported in survey research with non-clinical samples (M. P. Johnson, 1995, 2011; M. P. Johnson & Ferraro, 2000; J. B. Kelly & Johnson, 2008).[82]

It follows that in this thesis, I consider conflict with a partner, namely disagreements and arguments, to represent the experience of being provoked, and thus motivated, to engage in violence against a partner. It is assumed that when engaged in an argument or disagreement with a partner, a person will experience some degree of anger, which may manifest as a slight feeling of irritation through to intense rage.

[82] This type of violence has been labelled 'common couple violence' (M. P. Johnson, 1995; M. P. Johnson & Ferraro, 2000) or, more recently, 'situational couple violence' (M. P. Johnson, 2006). Johnson has developed a typology of relationship violence, which focuses on the context of violence, rather than the characteristics of the IPV perpetrator (M. P. Johnson & Leone, 2005). Over the years, Johnson has varied the number of 'types' discussed in his typology (see e.g. M.P. Johnson, 1995, 2005; J. B. Kelly & Johnson, 2008), however, the two main types of violence are arguably situational couple violence and intimate terrorism. Situational couple violence is partner violence that results from conflict (as described above), while intimate terrorism is defined by a pattern of controlling and coercive behaviour, perpetrated predominantly by men (M. P. Johnson & Leone, 2005). Thus, Johnson has argued that findings of gender symmetry in IPV perpetration are likely to reflect situational couple violence (M. P. Johnson, 2006, 2011; M. P. Johnson & Ferraro, 2000).

4.3.2 Provocation: The Role of External Frictions

The experience of being angry does not happen in a vacuum, namely, "A person cannot be angry without being angry *at* something" (Averill, 1983, p. 10, emphasis in original). There is an overarching consensus within the anger literature that anger is evoked by something external to the person experiencing the anger (Averill, 1983; Berkowitz & Harmon-Jones, 2004; Ellsworth & Smith, 1988; Novaco, 1994). Likewise, according to SAT, the provocation process begins when a person is faced with external frictions, which are defined as "unwanted external interferences" (Wikström, 2006, p. 89).

Frictions can appear in many guises: they may be physical (e.g. a partner pushing you) or verbal (e.g. a partner calling you a hurtful name or telling you a lie), or arise from another person's inaction (e.g. an unfulfilled promise) (Wikström, 2006; Wikström & Treiber, 2009).[83] Within the IPV literature, a number of common sources of conflict (i.e. frictions) have been identified. From their National Family Violence Survey (NFVS; see Chapter 1, Section 1.1.1), which asked both males and females about relationship conflict and violence, Straus and colleagues (2006 [1980]) found that disagreements over sex, finances, social activities, household chores, and children were frequent instigators of conflict in the participants' intimate relationships. Based on interviews with 62 couples who had experienced recent marital violence, Cascardi and Vivian (1995) found that marital violence perpetrated by both males and females was often triggered by conflicts related to finances and children. In his seminal study of dating violence in a sample of male and female college students, Makepeace (1981) found that sexual jealousy was the most frequent instigator of partner conflict and subsequent violence, followed by arguments over one or both partners' drinking behaviour, and arguments related to sex.

Focusing on the reasons for male to female perpetrated IPV, Dobash and Dobash have also repeatedly found that conflicts preceding partner violence are often rooted in disagreements about finances, household chores, sex, and children (Dobash & Dobash, 1979, 1984; Dobash, Dobash, Cavanagh, & Lewis, 2000; Dobash, Dobash, Cavanagh, & Medina-Ariza, 2007). However, Dobash and colleagues (2007) also cite "fidelity, jealousy, possessiveness, and authority" (p. 332) as pertinent sources of relationship conflict. Indeed, experimental research using hypothetical scenarios has found that contexts in which a female partner challenges the control of the male

[83] Wikström (2006) also submits that "A perceived source of friction may be an individual or an abstract entity such as 'the state' or 'the neighbors'" (p. 90).

partner, evokes jealousy, or is verbally aggressive, have been found to evoke aggressive responses in male participants (Babcock, Costa, Green, & Eckhardt, 2004). Holtzworth-Munroe and Smutzler (1996) found that IPV-men reported more anticipated anger, irritation, and aggressive responses to a female partner's behaviour in hypothetical scenarios than non-IPV men. This pattern held irrespective of whether the scenario depicted aggressive, distressed, or positive behaviour from the female partner.

Thus, the presence of frictions is an important element in the process of a person becoming provoked (engaging in conflict with a partner) for both male and female IPV perpetrators. However, the friction in and of itself does not result in a person experiencing anger and engaging in conflict with a partner. For a person to become provoked, the friction must be perceived and interpreted as a friction: the features of the setting (frictions) must intersect with the features of the person (their friction sensitivity) (Wikström, 2006; Wikström, et al., 2012). Accordingly, it is to friction sensitivity that I now turn.

4.3.3 Provocation: Friction Sensitivity

In the SAT framework, for a friction to induce provocation (i.e. anger and conflict), the friction must be perceived as intentionally antagonistic, and "*only* when a friction is seen as caused by an antagonistic intent will it cause a provocation" (Wikström, 2006, p. 90, emphasis in original). This notion is in line with the general observation in studies of anger that "the basic requirement for anger arousal is the perception of having been deliberately wronged in some way" (Berkowitz, 1994, p. 37; see for example: Averill, 1983; Ellsworth & Smith, 1988; Hazebroek, Howells, & Day, 2001; Helfritz-Sinville & Stanford, 2014).[84] Thus, in describing individual sensitivity to frictions, Wikström (2006) submits that "It is through his encounters with the circumstances of a particular setting and his interpretation and evaluation of these circumstances that an individual comes to have specific motivations" (p. 82). Accordingly, whether a person attributes antagonistic intent to the source of a friction is contingent on a process of perception and evaluation. Furthermore, the evaluation of whether the source of a friction is hostile or benevolent is considered to be influenced

[84] Berkowitz (1994) also reviews evidence that deliberate or antagonistic intent is not always necessary for anger to occur, and notes that "we are sometimes bothered even by chance mishaps" (p. 44). Nevertheless, Berkowitz (1994) readily acknowledges that anger is more likely to occur when a person perceives a friction (to use SAT's terminology) to be deliberate. See also, Berkowitz and Harmon-Jones (2004) for a similar, but updated review and discussion, and Frijda (1993) who makes a similar point when discussing the relationship between appraisal and anger.

by the individual's "knowledge, experiences, and morality" (Wikström, 2006, p. 90). Similarly, within the psychology of emotion literature, appraisal processes are the "central mechanism in the elicitation and differentiation of emotion" (Scherer, 2001, p. 369), and are influenced by "cues in the environment, previous experience, and a host of personality variables" (Lazarus, 2001, p. 51).[85] It follows that within the SAT framework, the concept of friction sensitivity is the individual level characteristic that represents a person's tendency (predisposition) to perceive a friction as intentionally antagonistic and to experience anger in response to the friction (Wikström & Treiber, 2009).

Friction sensitivity pertains particularly to the intensity of anger experienced, as measured by how angry a person feels in response to a friction (see Section 5.4.3 of Chapter 5). The concept of friction sensitivity set out in SAT aligns with Novaco's concept of a 'proneness to provocation', which refers to a predisposition to experience intense anger when faced with a provoking situation (Novaco, 1975, 1977, 1994). Likewise, friction sensitivity may be conceptually compatible with the psychological construct of trait anger described by Spielberger and colleagues (1983), which is defined as an enduring propensity to experience anger (Deffenbacher et al., 1996; Spielberger et al., 1983). Thus, within this thesis, individuals with high friction sensitivity are posited to be more easily provoked (experience more conflict and anger) and are therefore more likely to perpetrate more frequent acts of IPV. Indeed, as I will review shortly, research evidence indicates that there is a positive relationship between a propensity for anger (i.e. high state and trait anger, provocation proneness, anger expression, and so on) and IPV perpetration (e.g. Birkley & Eckhardt, 2015).

While it has been recognised that the experience of angry emotion and conflict often serve to instigate acts of IPV, the *tendency* or *propensity* to experience and express anger has arguably been the focus of the preponderance of research that has examined the relationship between anger and IPV perpetration. Accordingly, within this section, I provide a more detailed overview of pertinent findings from this body of research before clarifying how SAT considers friction sensitivity to influence IPV perpetration.

[85] Note that there is variation in how appraisal theories define the nature of appraisal, and the cognitive processes involved in appraisal; however, they all consider the intersection of the person and the environment (see further, Roseman & Smith, 2001, p. 11-13).

4.3.3.1 The Relationship between The Propensity to Experience Anger and IPV Perpetration: A Review of Pertinent Literature

Much of the IPV research that has examined the relationship between the propensity to the experience anger and IPV perpetration has examined whether there are differences between IPV perpetrators and non-violent individuals in the tendency to experience and express anger.[86] The majority of these studies have been carried out with male participants, and generally find that IPV males score more highly on general measures of anger propensity[87] than non-IPV males (Barbour, Eckhardt, Davison, & Kassinove, 1998; Beasley & Stoltenberg, 1992; Dutton, Saunders, Starzomski, & Bartholomew, 1994; Eckhardt, Jamison, & Watts, 2002; Holtzworth-Munroe & Smutzler, 1996; Maiuro, Vitaliano, & Cahn, 1987). However, a study by Telch and Lindquist (1984) did not find differences in anger propensity between violent and non-violent couples, while Hastings and Hamberger (1988) found that IPV men reported *lower* levels of anger than non-IPV men.

Other researchers have sought to examine differences in the 'anger profiles' of IPV males, and have found evidence of heterogeneity in anger propensity. Studies of men attending court-ordered treatment programmes for IPV perpetration have found that the majority of men do not present with severe anger problems (Eckhardt, Samper, & Murphy, 2008; Murphy et al., 2007). However, the men in these programmes who were classified as having severe anger problems (i.e. high state and trait anger, high anger expression, and low anger control) perpetrated more frequent and more severe IPV than the other men in the programmes (Eckhardt et al., 2008; Murphy et al., 2007). Eckhardt and colleagues (2008) also found that high anger IPV perpetrators had higher levels of psychopathology (i.e. borderline and anti-social personality), and to report higher levels of substance misuse, compared to the IPV perpetrators categorised as having lower levels of anger. Similarly, other studies that have more closely examined the personality characteristics of male IPV perpetrators found that increased propensity for anger was associated with psychopathology (particularly characteristics symptomatic of borderline personality) [88] and more frequent and severe

[86] As previously stated, this thesis concentrates on anger rather than hostility, and therefore in this section I focus on studies that have examined the relationship between a tendency towards anger and IPV perpetration, or studies that distinguish between anger and hostility.

[87] For example, the multidimensional anger inventory (Siegel, 1986), the state-trait anger scale (Spielberger et al., 1983), as well as later versions of the measure (see Spielberger & Reheiser, 2009), and the Novaco anger scale (Novaco, 1994). For an overview of assessment measures for anger and hostility see Eckhardt and colleagues (2004).

[88] Borderline personality is characterised by "intense, unstable interpersonal relationships, an unstable sense of self, intense and phasic anger, and impulsivity" (Dutton & Starzomski, 1993, p. 327).

IPV (Dutton et al., 1994; Hamberger & Hastings, 1986; Waltz et al., 2000). Therefore, while IPV perpetrators appear to have a higher propensity for anger than non-IPV perpetrators, evidence suggests that the anger propensity of IPV-perpetrators is not necessarily pathological, and that many IPV perpetrators have an anger propensity in the normal range. That said, pathological levels of anger also appear to be associated with more frequent and severe IPV perpetration.

It has been suggested that it may be more appropriate to measure IPV-perpetrators' partner-specific anger rather than a general tendency to experience anger (Eckhardt et al., 1997). Boyle and Vivian (1996) made the argument that "given that the violence in question occurs in the context of intimate relationships, investigators should focus on spouse-specific anger/hostility as well as generalized anger/hostility" (p. 296). Yet, there is a paucity of research that has sought to examine partner (or spouse) specific anger in relation to IPV perpetration. Two exceptions are studies by Boyle and Vivian (1996) and Holtzworth-Munroe, Rehman, and Herron (2000). Boyle and Vivian (1996) found that IPV-men in marital therapy had higher levels of both general and partner-specific anger propensity than non-IPV men also in marital therapy and non-IPV men not in marital therapy. While the IPV men had the highest levels of general and partner-specific anger, it was only partner-specific anger that significantly predicted frequency of IPV perpetration. In a later study, Holtzworth-Munroe and colleagues (2000) assessed men who had committed acts of IPV and men who had not committed acts of IPV on measures of general and spouse-specific anger. They found that the most violent men experienced high levels of both general and spouse-specific anger compared to non-violent and more moderately violent men, and that levels of anger increased in line with severity of violence and relationship dissatisfaction. However, Holtzworth-Munroe and colleagues (2000) found that, across the groups of IPV men and non-IPV men, scores for general anger were higher than scores for partner-specific anger. Thus, whether measures of partner-specific anger add explanatory value to understanding the relationship between anger and IPV perpetration is uncertain. The paucity of research that has included a measure of partner-specific anger propensity, along with the notable shortage of research with female participants on both partner-specific and general anger measures, means that substantive conclusions about whether measures of partner-specific anger propensity improve understanding of the relationship between anger and IPV perpetration cannot be made.

Few studies have examined the relationship between women's propensity to experience anger and their IPV perpetration. However, a small number of studies carried out with female samples suggest that anger propensity (i.e. the tendency to experience and express anger) is positively associated

with IPV perpetration in females. Studies that have been carried out with females arrested for IPV related offences found that high levels of anger expression and trait anger were associated with increased IPV perpetration (Shorey et al., 2011; Swan, Gambone, Fields, Sullivan, & Snow, 2005). Interestingly, the findings of studies that have compared the relationship between anger propensity and IPV perpetration in males and females suggest that anger may be more relevant to female than male IPV perpetration. Sprunger, Eckhardt, and Parrott (2015) studied a sample of male and female college students in mutually violent relationships. While trait anger was positively correlated with IPV perpetration in males and females, in a path model, trait anger significantly predicted IPV perpetration in females but not males. With a university sample of males and females, Thornton, Graham-Kevan and Archer (2015) found that a tendency to experience anger was predictive of both male and female IPV perpetration, but the relationship was significantly stronger for females. For males, low self-control was a stronger predictor of IPV perpetration.

Finally, a number of researchers have attempted to synthesise the body of research that has examined the relationship between anger and IPV perpetration. Qualitative literature reviews have observed a reasonably consistent relationship between anger and IPV perpetration, although they note that some studies (e.g. Hastings & Hamberger, 1988; Telch & Lindquist, 1984) have not found support for the relationship (Eckhardt et al., 1997; Holtzworth-Munroe et al., 1997).

Meta-analytic reviews by Schumacher and colleagues (2001) and Stith and colleagues (2004) reviewed the risk factors for male to female IPV perpetration and report combined results for anger and hostility. The review by Schumacher and colleagues (2001) found that anger and hostility were positively associated with IPV perpetration in both clinical and community samples of men, with effect sizes ranging from small to large (r = 0.18 to r = 0.52). The meta-analytic review carried out by Stith and colleagues (2004) found that high anger and hostility was a moderate risk factor for IPV perpetration (r = .26). A meta-analytic review by Norlander and Eckhardt (2005) reported separate effect sizes for the relationship between anger and hostility and IPV perpetration in males, and thus it is possible to identify the unique relationship between anger and IPV perpetration. Norlander and Eckhardt (2005) found anger to be moderately associated with IPV perpetration (d = .47).

In a more recent meta-analysis, Birkley and Eckhardt (2015) included studies that had examined the relationship between anger and male IPV perpetration as well as studies that had investigated the relationship between anger and female IPV perpetration. Birkley and Eckhardt (2015) also

reported separate effect sizes for anger and hostility (as well as internalising negative emotion, such as anxiety and depression), and again found that anger was moderately associated with IPV perpetration (d = .48). The authors also estimated separate effect sizes for males and females, however they used a composite 'anger-related' construct of anger, hostility, and internalising negative emotion. The composite anger construct was found to be moderately associated with IPV perpetration in both males (d = .43) and in females (d = .37), with no significant differences in the size of the effects. With regard to the severity of IPV perpetration, Birkley and Eckhardt (2015) also found that for males and females, increased levels on the composite anger construct were positively associated with the severity of violence perpetrated (d = 1.00).

Thus, taken together, research has shown that there is a consistent moderate relationship between anger and IPV perpetration. However, it is readily acknowledged that a propensity for anger does not necessarily translate into increased angry emotion in response to frictions, and angry emotion does not necessarily result in aggressive or violence responses (e.g. Birkley & Eckhardt, 2015). For example, a small sample (n = 33) study by Eckhardt, Jamison, and Watts (2002) found that while IPV-men had a greater anger propensity than non-IPV men, IPV-men did not articulate more anger in response to a hypothetical scenario than non-IPV men. However, IPV men were more likely than non-IPV men to report aggressive responses to hypothetical scenarios designed to induce anger. Eckhardt and colleagues (2002) suggest that this finding may indicate that IPV men have more difficulty in responding non-aggressively to anger and conflict than non-IPV men. However, the authors acknowledge that the extremely small sample size means caution should be applied when interpreting these results.

Notwithstanding the caveat regarding sample size, the study by Eckhardt and colleagues (2002) indicates that while a propensity for anger and the experience of anger may often serve to instigate aggressive or violent responses, anger does not necessarily translate into violence. More knowledge is needed to understand the mechanisms linking anger and conflict to partner violence (this point is also made by Birkley & Eckhardt, 2015). There is a need to understand *how* a propensity for anger (friction sensitivity) contributes to the experience of anger (provocation), and *how* the experience of anger (provocation) translates into IPV perpetration. This thesis attempts to answer these questions using the analytical framework of SAT. However, before concluding this chapter, and summarising how the provocation process in SAT will be applied to the study of IPV perpetration in this thesis, I turn to one final construct of interest when considering the relationship

between provocation and partner violence, a construct that is not formally included in the provocation process of SAT: partner cohesion.

4.3.4 Provocation: The Role of Partner Cohesion

Upon review of the literature pertaining to partner conflict and IPV, it becomes clear that feelings of jealousy and distrust, conflicting interests and priorities (e.g. regarding money and sex), and disappointment or disapproval of a partner's behaviour (e.g. a partner's drinking behaviour), are frequent antecedents of conflict and violence (e.g. Dobash & Dobash, 1984; Dobash et al., 2007; Langhinrichsen-Rohling et al., 2012; Makepeace, 1981; Straus et al., 2006 [1980]). I submit that these themes reflect a lack of cohesion between partners, and that a lack of partner cohesion contributes to the occurrence of conflict and violence in intimate relationships. Accordingly, I suggest that frequent partner conflict is indicative of low partner cohesion.

In this thesis, partner cohesion is taken to denote mutual trust and respect, shared values, and a willingness to help and support each another. This definition draws upon the concept of family cohesion, which can be defined as "shared affection, support, helpfulness, and caring among family members" (Barber & Buehler, 1996, p. 433), as well as the concept of social cohesion, which refers to the "mutual trust and shared expectations" of individuals living within the same community (Sampson, 2006; see also, Wikström, 2007).

Brief references to partner cohesion can also be found in the IPV literature, particularly research that has investigated marital (rather than dating) violence (e.g. Eckhardt, Barbour, & Davison, 1998; Margolin, John, & Gleberman, 1988). However, these mentions of partner cohesion are typically in reference to measures of marital satisfaction, where partner cohesion is subsumed within a broader measure of marital satisfaction (Margolin et al., 1988). Thus, the relationship between the specific construct of partner cohesion and IPV perpetration is often obscured.

Frequently used measures of marital satisfaction in IPV research are the Dyadic Adjustment Scale (DAS; Spanier, 1976) and the Short Marital-Adjustment Test (SMAT; Locke & Wallace, 1959). These measures include a number of items that align with the concept of partner cohesion adopted in this thesis: for example, both the DAS and the SMAT ask respondents to indicate how much they agree with their partner on the 'philosophy of life', which can be taken to indicate the extent to which partners share the same values. Both measures ask respondents how much they confide

in their partner, which may correspond with the level of trust in the relationship. However, many of the questions on these two measures ask about important elements of relationship quality *other* than partner cohesion. For instance, both measures ask respondents if they regret getting married or living with their partner, and if they are happy in the relationship (see further, Locke & Wallace, 1959; Spanier, 1976). Thus, these measures of marital (or cohabiting) relationship satisfaction provide a global measure of "marital quality … and general interaction patterns" (Bradbury, Fincham, & Beach, 2000, p. 973).

While the specific relationship between partner cohesion and IPV perpetration is typically neglected in empirical studies of IPV perpetration, a number of reviews have found that the umbrella construct of marital dissatisfaction is consistently related to IPV perpetration. An early review by Hotaling and Sugarman (1986) found that low marital satisfaction was a consistent risk factor for male to female IPV perpetration. More recent meta-analyses by Stith and colleagues (2004) and Stith and colleagues (2008) found that low marital satisfaction was moderately related to both male and female IPV perpetration, although the effect was slightly stronger for males than females in both meta-analyses. While low marital satisfaction is associated with IPV perpetration, there is theoretical uncertainty regarding whether low marital satisfaction contributes to IPV in a relationship or is the result of IPV (Margolin et al., 1988; Stith et al., 2008). However, it has been suggested that marital dissatisfaction has an indirect rather than a direct effect on partner violence (Holtzworth-Munroe, Smutzler, Bates, 1997), and is likely to contribute to the *instigation* of partner conflict and violent acts (Langhinrichsen et al., 2012).

Likewise, within this thesis, partner cohesion is included as part of the provocation (motivation) process. It is theorised that a person's perception of the cohesion within his or her relationship (i.e. the level of trust, respect, shared values and cooperation) will contribute to his or her tolerance for frictions. It is further theorised that low partner cohesion (i.e. low levels of trust, respect, shared values, and cooperation) will correspond with a reduced tolerance for frictions. Thus, it is hypothesised that low partner cohesion will translate into increased IPV frequency by influencing the level (frequency) of partner conflict.

4.3.5 Provocation and Intimate Partner Violence: Summary and Specification of Constructs

Throughout this section I have specified the provocation process in SAT, and have drawn on the IPV literature to illustrate how pertinent correlates of IPV perpetration align with the theoretical constructs that comprise the process of provocation. I conclude this section by summarising these constructs and specifying how they are applied to the context of partner violence. How these constructs are captured and analysed will be detailed in Part 3 of this thesis.

Provocation Within the Context of Intimate Partner Violence

Provocation is defined as the experience of negative affect, such as anger, when a person perceives the source of an external friction to be antagonistic (Wikström, 2006). Within the context of this thesis, conflict with a partner, namely arguments and disagreements, is taken to represent the experience of being provoked. In line with research evidence that conflicts are often "emotionally charged" (Winstok, 2008, p. 288), and can evoke anger (e.g. Crane & Testa, 2014), in this thesis conflict is regarded as a proxy for negative affect and thus provocation.

Friction Sensitivity Within the Context of Intimate Partner Violence

Friction sensitivity pertains to a person's tendency to perceive a friction as intentionally antagonistic, and to experience anger in response to the friction (Wikström, 2006; Wikström & Treiber, 2009). In this thesis, I will concentrate on examining the influence of *partner-specific friction sensitivity* on individuals' tendency to become provoked. The rationale for this is two-fold. First, according to SAT, individuals have action-specific moral rules, namely "moral rules of relevance to breaking particular kinds of rules of conduct" (Wikström et al., 2012, p. 16). Following a similar logic, I submit that people have *context specific friction sensitivity.* Thus, it is posited that individuals vary in their particular sensitivities (as already stated in SAT, see e.g., Wikström, 2006), but also, *an individual will vary in his or her sensitivity to particular types of frictions*. This aligns with the differential nature of the motivation process as defined by SAT (Treiber, 2017).

The rationale for including partner-specific friction sensitivity is also inspired by the IPV literature (Boyle & Vivian, 1996; Eckhardt et al., 1997; Holtzworth-Munroe, Rehman, et al., 2000). Some

IPV scholars have suggested it would be prudent to analyse partner-specific anger in relation to IPV perpetration "given that the violence in question occurs in the context of intimate relationships" (Boyle & Vivian, 1996, p. 296). Accordingly, it is hypothesised that partner-specific friction sensitivity will influence a person's tendency to become provoked within the context of intimate relationships.

Frictions Within the Context of Intimate Partner Violence

Frictions are "unwanted external interferences" (Wikström, 2006, p. 89), which, within the context of intimate relationships, may pertain to a disagreement over social activities or household responsibilities, through to sexual jealousy and infidelity (Dobash et al., 2007; Makepeace, 1981; Straus et al., 2006 [1980]). If a person perceives such frictions as antagonistic (as a product of his or her partner-specific friction sensitivity), then he or she is likely to become provoked (Wikström, 2006). Thus, in line with the findings of previous research regarding the instigators of partner conflict and the context-specific characterisation of friction sensitivity, in this thesis, frictions that contribute to the instigation of IPV actions are also taken to be context-specific. Namely, frictions relevant to IPV perpetration are those 'unwanted external interferences' that occur within the context of intimate relationships.

Partner Cohesion Within the Context of Intimate Partner Violence

Partner cohesion is not formally included in the SAT process of provocation. However, within this thesis it is included as a factor that contributes to the experience of provocation. I have defined partner cohesion as a person's perception of the level of trust, respect, shared values and cooperation within his or her intimate relationship. Partner cohesion (or rather, a lack of partner cohesion) captures themes such as jealousy, conflicting interests and priorities, and disapproval of a partner's behaviour, which have been found to contribute to people's motivation for using violence against a partner (Dobash & Dobash, 1984; Dobash et al., 2007; Langhinrichsen-Rohling et al., 2012; Makepeace, 1981; Straus et al., 2006 [1980]). Accordingly, in this thesis I consider low partner cohesion to contribute to a person becoming provoked in the context of an intimate relationship by influencing his or her tolerance of frictions.

Thus, it is theorised that low partner cohesion and high partner-specific friction sensitivity contribute to a person becoming provoked (i.e. experiencing anger and conflict with a partner) when faced with partner-specific frictions.

4.4 The Provocation Process and Its Application to Intimate Partner Violence: A Summary

I began this chapter by drawing attention to the important yet neglected role of motivation in explanations of criminal actions. This deficiency of criminological theories has been particularly highlighted by Wikström and colleagues (2012). It follows that in developing SAT, Wikström has included motivation as a necessary component in the explanation of criminal (moral rule-breaking) actions. Throughout this chapter, I have concentrated on the motivation process of provocation and its application to IPV. To this end, I provided a description of the provocation process and drew upon anger and emotion literatures to add theoretical depth to existing descriptions of the provocation process in the SAT literature. Moreover, I have illustrated how relevant correlates of IPV perpetration align with the constructs of the provocation process in SAT. In synthesising the theoretical constructs of the provocation process in SAT and knowledge of pertinent correlates of IPV perpetration, I have proposed an analytical framework that can be applied to understanding how IPV perpetrators become motivated (provoked) to use acts of violence against a partner. Thus, this chapter contributes theoretically to both SAT and IPV literatures.

4.4.1 Integrating the Motivation and Causal Processes: Specifying Testable Hypotheses

As stated at the end of Section 4.3.5, low partner cohesion and high partner-specific friction sensitivity are posited to contribute to a person becoming provoked (experiencing anger and engaging in partner conflict) in response to frictions within his or her relationship. However, at the beginning of the chapter, I made clear that SAT distinguishes between the processes of motivation and cause. Motivation is argued to be necessary for moral rule-breaking actions to occur, but motivation in and of itself does not *cause* a person to break moral rules (Wikström et al., 2012). To explain why a person responds to motivation with moral rule-breaking actions (i.e. violence against a partner) it is necessary to understand the causal process. As I described in Chapter 3, the causal

process in SAT is the perception-choice process, of which personal morality is arguably the most important individual level component (Wikström & Treiber, 2007). It follows that in this thesis I concentrate on the role of personal IPV morality in guiding people's behavioural responses to provocation (partner conflict). In line with the assumptions of SAT, it is theorised that an individual with strong IPV morality will be less likely to respond to provocation (partner conflict) with violence because his or her morality guides his or her perception towards non-violent action alternatives. Alternatively, an individual with weak IPV morality is theorised to be more likely to respond to conflict with violence because his or her morality guides his or her perception towards violent action alternatives. Therefore, in this thesis I examine how components of the motivation process and causal process of SAT work together to explain why people are moved to commit violent actions against a partner. To this end, the following two broad hypotheses will be tested in Part 3 of this thesis:

1. High partner-specific friction sensitivity and low partner cohesion will indirectly influence individuals' use of violence against a partner by influencing levels of partner conflict (provocation).
2. Personal IPV morality will moderate the relationship between partner conflict and IPV perpetration, whereby individuals with strong IPV morality will be less likely to respond to conflict (provocation) with violence than individuals with weak IPV morality.

From the outset, I have made clear that this thesis takes a gender inclusive approach to explaining IPV perpetration. Therefore, it is also postulated that hypotheses 1 and 2 will hold for males and females. As illustrated in Section 4.3, knowledge about the relationship between markers of provocation (e.g. anger) and IPV perpetration has been predominantly gathered from male samples. Therefore, this thesis will contribute to knowledge about the motivational and causal processes that underlie both male and female IPV perpetration.[89]

Finally, it should be noted that despite the necessary role that motivation is argued to play in SAT's explanation of why people break moral rules, the focus of SAT research has been on testing the causal process (the perception-choice process) rather than the motivation and causal processes in conjunction. Therefore, in testing SAT's suppositions regarding the relationship between

[89] The full theoretical model and the specific questions to be addressed by the research study will be presented in Chapter 6.

motivation and causal processes, this research provides a novel contribution to the theoretical and empirical SAT literature.

PARTS 1 and 2: A Summary

Parts 1 and 2 of this thesis detailed the rationale for studying the causes of IPV within a criminological context, and delineated the theoretical framework of the thesis. In Part 1 (Chapter 1) I chronicled the emergence of IPV as a criminal justice issue: IPV is no longer considered a private matter hidden 'behind closed doors'. Rather, acts of violence between intimate partners are now recognised (in many countries) as criminal acts in the same way that acts of violence between non-intimates are (e.g. Buzawa & Buzawa, 2003; Smartt & Kury, 2006). Yet, theories of the causes of IPV have developed separately from criminological theories (Fagan & Browne, 1994). It is typically argued that it is not appropriate to explain IPV within the frameworks of general theories of violence and crime (Dobash & Dobash, 1979; Gordon, 2000; C. Hoyle & Sanders, 2000). Furthermore, theories of IPV predominantly focus on explaining why men are violent towards women, and scholars often assert that where women are violent, gendered explanations for IPV perpetration are needed (e.g. Bookwala, Frieze, Smith, & Ryan, 1992; Foo & Margolin, 1995; Mennicke & Wilke, 2015; O'Keefe, 1997). It has been my contention that as a type of criminal behaviour it *is* appropriate, even necessary, to explain the causes of IPV within a criminological framework. Accordingly, I have presented the criminological theory of SAT as a suitable framework within which IPV can be understood and explained as criminal (rule-breaking) behaviour, irrespective of whether the perpetrator is male or female.

In Part 2 (Chapters 2-4), I provided a detailed account of SAT. In Chapter 2, I delineated SAT's characterisation of acts of crime as acts of moral rule-breaking, and I defined the nature and role of personal morality in the SAT framework. In doing so, I illustrated how acts of IPV can be defined and understood as acts of moral rule-breaking. Chapter 3 gave a detailed description of the analytical framework of SAT and illustrated how SAT submits the causes of moral rule-breaking (such as acts of IPV) should be explained. Drawing on the weaknesses of criminological theories identified by Wikström (Wikström, 2010a; Wikström et al., 2012), I also highlighted some key deficiencies in existing approaches to understanding the causes of IPV, and illustrated how the analytical approach advocated by SAT may serve to remedy these deficiencies.

Finally, in Chapter 4, I turned to the issue of motivation. The SAT framework puts much emphasis on the causal process leading to moral rule-breaking actions; but SAT also makes clear that the causal process must be instigated, namely a person must first become motivated (e.g. Wikström et al., 2012). SAT specifies two types of motivation that may instigate moral rule-breaking:

temptations and provocations. However, in Chapter 4, I concentrated on provocation as the instigator of IPV. I considered how SAT's characterisation of provocation as motivation for moral rule-breaking could be applied to the explanation of IPV. I drew upon pertinent IPV literature to define partner conflict (arguments and disagreements) as the experience of provocation, and a tendency to experience anger towards a partner (partner-specific friction sensitivity) and low partner cohesion to be key factors leading to partner conflict. More specifically, I posited that high partner-specific friction sensitivity and low partner cohesion indirectly influence individuals' use of violence against a partner by influencing levels of partner conflict (i.e. frequency of provocation). Finally, the reader was reminded that while SAT submits that the experience of motivation is necessary for moral rule-breaking, it is not sufficient (Wikström et al., 2012). Rather, motivation (i.e. provocation in the form of partner conflict) signifies the instigation of the causal process leading to action in the SAT framework. Thus, it is between experiencing partner conflict and perpetrating an act of IPV (or not), that morality is posited to exert its influence by guiding people's perception towards or away from IPV as an action alternative.

It follows that within this thesis the key variables of interest are IPV perpetration frequency, personal IPV morality, partner conflict, partner-specific friction sensitivity, and partner cohesion. In Part 3 (Chapters 5 and 6), I describe the method and analytical strategy adopted within this thesis. Chapter 5 describes the study design, sample, and the measures used to capture the variables of interest. Chapter 6 provides an overview of the theoretical model to be tested, the research questions to be addressed, and the analytical strategy used to answer the research questions.

PART 3: Method and Analytical Strategy

5: Study Design, Sample, and Data Collection

Within this chapter I provide a description of the method used to collect the data analysed in this thesis. The data used within this thesis is taken from the eighth wave of the longitudinal Peterborough Adolescent and Young Adult Development Study (PADS+); therefore, I begin by providing an overview of PADS+. I then specify the characteristics of the sample that make it particularly relevant for studying intimate partner violence (IPV) within the explanatory framework of situational action theory (SAT). Finally, I provide descriptions and descriptive statistics of the measures used by PADS+ to capture data on the key variables of interest in this thesis: IPV perpetration, relationship conflict, partner-specific friction sensitivity, partner cohesion, and IPV-specific morality.

5.1 The Peterborough Adolescent and Young Adult Development Study (PADS+): An Overview

The data analysed in this thesis was collected as part of the eighth wave of the longitudinal Peterborough Adolescent and Young Adult Development Study (PADS+), a study developed to test the key suppositions of SAT (Wikström et al., 2012). More specifically, the study is designed to collect data on individual characteristics, social conditions, and their intersection, to explain and predict people's involvement in moral rule-breaking behaviour (Wikström et al., 2012).

The study site of PADS+ is the town of Peterborough in the East of England. Peterborough was chosen as the study site because it represents a typical British city (with regard to land use, crime patterns, and social conditions) with a population representative of the general UK population (with regard to levels of social disadvantage, and ethnic and religious heterogeneity).[90] Accordingly, data collected from PADS+ is considered generalisable to the population of the UK (Wikström et al., 2012).[91]

The study began in 2002, with the selection of a sample of 716 young people who were in Year 7 at secondary school (age 11-12 years).[92] The PADS+ sample was obtained from a sampling frame of all young people who entered Year 7 in 2002 in the study area of Peterborough; the sampling frame was comprised of 2,349 individuals (Wikström et al., 2012). Of these 2,349 young people, 1000 were randomly selected to take part in the study (Wikström et al., 2012).[93] The parents of the selected young people were provided with information about PADS+ and asked to give active consent to take part in an initial 'parent interview' to collect data on the young people's family and social circumstances, as well as "retrospective information" about the young people, such as childhood conduct problems (see Wikström et al., 2012, p. 61-63). In addition, parents were asked to give active consent for their son or daughter to be a participant in the study, and to be interviewed in subsequent waves of data collection.[94] Following this process, the parents of 716 young people

[90] Although Peterborough has a higher than average Asian population than the national UK average. For a detailed description and analysis of the social and environmental features of Peterborough, as well as the crime rate, see Wikström and colleagues (2012, Chapter 4).
[91] For further detail about Peterborough and the rationale for choosing Peterborough as the study site for PADS+, see Wikström et al. (2012, Chapter 2).
[92] In England and Wales, Year 7 is the seventh year of compulsory education; in most counties, Year 7 is the first year of secondary school.
[93] Note that due to some of the young people and their families moving out of the study area, only 991 ended up being part of the random sample (see Wikström et al., 2012, p. 55).
[94] At each subsequent wave of data collection, the young people were asked to give their consent to take part in the study.

gave consent for their children to participate in the study, which represents just under a third of the original sampling frame (for extended detail of the sampling process see Wikström et al., 2012).[95] It follows that the random sampling technique employed by PADS+ generated a sample that is both representative of young people (and their families) living in Peterborough at the time of selection, and accordingly, the UK as a whole (again, for a detailed breakdown of the socio-demographic characteristics of the sample at the beginning of the study see Wikström et al., 2012).

Following selection of the study's sample in 2002, the first wave of data collection was the aforementioned parents' interviews, which were carried out in 2003 (Wikström et al., 2012). Subsequent waves of data collection involved interviewing the young people only (hereafter referred to as 'the participants'). The first wave of data collection with the study participants was carried out in 2004, and annual waves of data collection were subsequently carried out until 2008 (Waves 1-5), then biannually for Wave 6 (2010) and Wave 7 (2012). The most recent wave of data collection, Wave 8, was carried out in 2015. The retention rate of PADS+ is particularly impressive: at Wave 8, 90.8% of the original 716 participants took part in the study.

5.2 Sample Characteristics: Sex, Age, Relationship Status, and Sexual Orientation

At Wave 8, 650 participants completed the questionnaire: 309 males and 341 females. However, for this thesis, only data from those participants who had an intimate partner in the previous 12 months was included in the analysis. An intimate partner was defined as a male or female with whom the participant had a romantic and/or sexual relationship with. Accordingly, the sample for this thesis included 541 individuals: 244 males and 297 females. Because the PADS+ sample contains both males and females, it allows for a test of the generalisability of SAT to explain male and female moral rule-breaking behaviour. This is particularly noteworthy for the study of IPV, which has been plagued by a gender debate for decades (see e.g. overviews by Kimmel, 2002; Straus, 1999). As noted in earlier chapters, the gender debate chiefly concerns whether males and females are equally likely to perpetrate IPV (e.g. Straus, 1999), and relatedly, whether explanations of IPV should be gendered (e.g. R. B. Felson, 2006). The position taken within this thesis is to

[95] When PADS+ was designed, the aim was to obtain a study sample that was one third of the sampling frame, in order to allow for sufficient statistical power (Wikström et al., 2012).

explain IPV within a framework of moral rule-breaking, irrespective of gender or biological sex. In adopting SAT as the theoretical framework, the core aims of this thesis are to examine whether the theoretical principles of SAT can be applied to the explanation of IPV, and whether this explanation holds for males and females who have perpetrated IPV. Therefore, the PADS+ sample is ideally suited to address these aims.

At Wave 8, the PADS+ participants were between 24 and 25 years of age. IPV has been found to be more prevalent amongst adolescent and young adult relationships than in older adult relationships (Brown & Bulanda, 2008; Dardis, Dixon, et al., 2015; W. L. Johnson, Giordano, Manning, & Longmore, 2014; O'Leary, 1999; Shortt et al., 2012). For example, Wendi Johnson and colleagues (2014) compared male and female trajectories of IPV perpetration between the ages of 13 to 28, and found that for both males and females, IPV perpetration peaked in the early twenties and declined in the mid-to-late twenties. While the age of the PADS+ sample at Wave 8 corresponds with the age at which IPV perpetration began to decline in the W. Johnson and colleagues (2014) sample, the mid-twenties still represents an age at which IPV perpetration is found to be highly prevalent. Therefore, the age of the PADS+ sample at Wave 8 is still appropriate and relevant for a study of IPV.[96]

At Wave 8, the vast majority (over 90%) of PADS+ participants who reported having had at least one intimate relationship in the last year were in dating rather than marital relationships.[97] Traditionally, much of the IPV theoretical and empirical literature was concerned with heterosexual marital violence, reflected by terms such as 'domestic violence' or 'wife abuse' (a classic example is Dobash & Dobash, 1979). However, IPV is now recognised as a prevalent issue in dating and cohabiting relationships (for a review see Shorey et al., 2008).[98] Likewise, IPV within same-sex relationships has been found to be as prevalent as it is in heterosexual relationships (Alexander, 2002; Elliot, 2004; Murray & Mobley, 2009; Stiles-Shields & Carroll, 2015). Following the same logic that underlies SAT's supposition that male and female moral rule-breaking is explainable

[96] Note that not all of the measures used to collect data on IPV and related theoretical constructs were administered at earlier waves of PADS+ data collection (see the 'Measures' section of this chapter). Therefore, the measures and analyses for this thesis are restricted to Wave 8.

[97] Here, I use the term 'dating relationship' to include participants who were dating but not living together *and* participants who were dating and cohabiting but not married. Of those individuals who reported having been in a dating or marital relationship in the last year, 58.8% (n = 318) of participants who had a partner had also lived with at least one partner for at least one month in the previous year.

[98] As noted previously, see also the important article by Makepeace (1981).

within the same theoretical framework, IPV within same-sex relationships should be explainable within the same moral rule-breaking framework as IPV within heterosexual relationships.

However, the majority (92.2%, *n* = 499) of participants in the PADS+ sample at Wave 8, who had been in at least one intimate relationship in the previous year, reported that they had only been in heterosexual relationships. By comparison, 14 (2.6%) females reported being in one or more same-sex relationship in the previous year, and 11 (2%) males reported having been in one or more same-sex relationship in the previous year. One male (0.2%) reported having been in both same-sex and heterosexual relationships in the previous year while 16 (3%) females reported having been in both same-sex and heterosexual relationships in the previous year. Therefore, because the number of individuals who had been in same-sex relationships in the sample was so small, it was not possible to carry out meaningful statistical analyses to examine whether the theoretical framework tested in this thesis is equally applicable to explain IPV across heterosexual and same-sex relationships.

5.3 Data Collection

At each wave of PADS+ data collection, participants completed a comprehensive interview that typically lasted between 1.5 and 2 hours. Throughout the waves of PADS+ data collection, most interviews took place in person with the participants, where participants attended a group session in which they were interviewed and completed data collection measures simultaneously. Data collection sessions were carried out either at participants' schools when they were younger, or at public libraries, local colleges, and community halls when they were older. Where participants could not attend data collection sessions at school or at public locations, they were interviewed in their homes or via the telephone.

During each interview, highly trained PADS+ researchers administered a number of different data collection instruments. Because this thesis concentrates on individual-level elements of the SAT framework, and analyses data from specific individual-level measures, I only describe the data collection method relevant to these measures (for details of all PADS+ measures see Wikström et al., 2012, Chapter 2).[99] The data analysed within this thesis is taken from measures administered as part of the interviewer-led PADS+ questionnaire. The PADS+ questionnaire taps into key SAT constructs such as moral rules, moral emotions, and self-control, as well as topics such as family

[99] Note that I worked as a PADS+ research assistant from 2009 until 2013, and led the data collection for Wave 7.

relationships, intimate partner relationships, crime involvement, and substance use (again, for detail on the topics addressed in the PADS+ questionnaire see Chapter 2 of Wikström et al., 2012).[100]

The interviewer-led PADS+ questionnaire was administered simultaeously to a group of up to four participants. A researcher introduced each section of the questionnaire to the group of participants, provided instructions, and gave clarification and defintions of concepts where necessary. The participants then completed the applicable section of the questionnaire; if participants completed the section more quickly than the other participants, they were asked to check that they had not missed any questions, and to wait for further instructions before completing the next section (for further detail on the interviewer-led method, see Wikström et al., 2012, p. 62-64).[101] The interviewer-led approach was adopted by PADS+ because it ensures that all participants are provided with clear instructions, but also keeps "problems with internal non-response, reliability, and consistency in participants' answers to a minimum" (Wikström et al., 2012, p. 64).

Until Wave 8, PADS+ questionnaires administered in person were completed with pen and paper. At Wave 8, questionnaires were completed on electronic tablets using a web-based version of the questionnaire. The web-based version of the questionnaire was accessed via a password protected hyperlink. Participants' responses to the questionnaire items were automatically emailed to the PADS+ email account upon participants pressing 'submit' at the end of the questionnaire. No identifying information was submitted via the web-based questionnaire. The web-based version of the PADS+ questionnaire had the added benefit of navigating filter questions for participants. For example, if a participant responded 'Yes' to a question that would lead to follow-up questions, the follow-up questions would automatically appear. Likewise, if a participant answered 'No' to the same question, the follow-up questions would not appear. Therefore, the web-based version of the PADS+ questionnaire reduced ambiguity and thus provided a more accurate and straight-forward method of data collection for both participants and researchers.

[100] The exact content of the PADS+ questionnaire items has varied slightly throughout the waves, for example, questions about intimate partner violence were only added at Wave 4, and have become increasingly comprehensive in subsequent waves of data collection.

[101] Where participants were interviewed over the phone, from Wave 6 onwards, a web-based version of the questionnaire was used. Participants were emailed a password protected link to the questionnaire, and were guided through the questions by the researcher as they would have been if they had completed the questionnaire in person. The participants could then submit their completed questionnaire and the results would be sent to the PADS+ email account. No identifying information was submitted via the online questionnaire.

It is importnant to note that although participants completed the questionnaire in groups, partitions were used to allow participants to complete the questionnaire in privacy. The PADS+ questionnaire covers a number of sensitive topics, and therefore privacy when completing the questionnaire is essential in order to foster honest answers from participants. In addition to providing participants with privacy during the data collection process, a principal philosophy of PADS+ has been to ensure that participants feel "secure in the confidentiality of their information and the impartiality of the research team" (Wikström et al., 2012, p. 84). PADS+ researchers make clear to participants that the information provided by them is confidential, and that all data is anonymised and kept securely; participants are reminded of this throughout the PADS+ questionnaire. Moreover, due to the longitudinal nature of PADS+, participants' trust in the study has been cultivated over many years; Wikström and colleagues (2012) suggest that the fact that so many participants continue to take part in the study is symptomatic of participants' trust in the study and honesty in their answers to sensitive questions.

5.4 Measures

In this section, I provide a description of the measures used to capture IPV perpetration frequency, partner conflict frequency, partner-specific friction sensitivity, partner cohesion, and IPV-specific moral rules and moral emotions. All measures used in this thesis were constructed by PADS+, either directly by Per-Olof Wikström, (the PADS+ principal investigator) or by PADS+ researchers and overseen by Wikström. While the measures had been used in previous waves of PADS+ data collection, some measures were adapted at Wave 8 to include partner and/or partner-violence specific items. Any modifications made at Wave 8 are noted in the description of the measure. Again, all modifications to measures were overseen by Wikström.

5.4.1 Self-Reported IPV Perpetration

To capture the frequency of IPV perpetration, this thesis used data collected as part of the 'relationships section' of the PADS+ questionnaire at Wave 8. The partner violence measure adopted by PADS+ closely resembles the widely used physical assault scale of the conflict tactics scales (CTS; Straus, 1979) and the revised conflict tactics scales (CTS2; Straus, Hamby, Sue, &

Sugarman, 1996).[102] The typical format of CTS administration is to present a participant with the relevant scale (e.g. the physical assault scale), which describes different conflict tactics (e.g. assaultive acts),[103] and to ask how many times in the last year he or she has used each tactic against another person (e.g. a partner), and how many times in the last year each tactic has been used against him or her (Straus, 1990a; Straus et al., 1996).[104] Therefore, the physical assault scale of the CTS provides a quantitative measure of IPV perpetration and victimisation (Straus et al., 1996).

Rather than asking participants to freely provide a number of times that they have used or have been the victim of each assaultive act, the CTS typically uses numeric response categories that can be used to compute a frequency score by summing the mid-point of the response category (where applicable) for each item (Straus, 1979, 2004b; Straus et al., 1996). However, the CTS does not use equally spaced response categories, namely the first categories are 'Never', 'Once', 'Twice' while later categories are '3-5 times', '6-10 times', '11-20 times', and 'more than 20 times'. Therefore, for the response categories of 'Never', 'Once' and 'Twice', the numeric score is the same as the response category, for example the response category of 'Never' equals a frequency score of 0. For the response categories of '3-5 times' and above, the frequency score is the mid-point of the category, for example the response category of '3-5 times' equals a frequency score of 4. However, the final category of 'more than 20 times' is assigned the mid-point of 25 (Straus, 1979, 2004b; Straus et al., 1996).

The measure of physical partner violence used by PADS+ follows the format of the CTS and CTS2, and gathers data on both IPV victimisation and perpetration. However, because this thesis is concerned with explaining why individuals break moral rules that condemn the use of violent actions against a partner, only data from the physical IPV perpetration scale was analysed. It should also be noted that the items of the PADS+ measure of physical partner violence do not correspond

[102] Each version of the CTS is comprised of a number of scales designed to capture the prevalence and frequency of different conflict resolution tactics. The original CTS (Straus, 1979) was comprised of a reasoning scale, verbal aggression scale, and a violence scale. The CTS2 saw the addition of a scale to measure sexual coercion/abuse, and a scale to measure physical injury as the result of physical violence (Straus et al., 1996). The original scales were also revised for the CTS2 to improve specificity: the reasoning scale became the negotiation scale, the verbal aggression scale became the psychological aggression scale, and the violence scale became the physical assault scale (Straus et al., 1996).

[103] The theoretical assumption that underlies the CTS and CTS2 is that "conflict is an inevitable part of all human association, whereas violence as a tactic to deal with conflict is not" (Straus et al., 1996, p. 284). Therefore, the physical assault scale of the CTS is a measure of the prevalence and frequency that individuals have used violence/assaultive acts as a conflict tactic during a particular referent period.

[104] The typical referent period for the CTS is one year, but can be adapted as necessary or where applicable (Straus et al., 1996).

exactly with the CTS and the CTS2. The items of the measure of physical partner violence used by PADS+ can be found in Appendix A.

The physical IPV scale that was administered to PADS+ participants at Wave 8 was comprised of eight items ranging from less severe assaultive actions, namely violent actions that are conceivably less serious moral infractions, such as pushing or shoving a partner, through to more severe assaultive actions that represent serious moral infractions, such as striking a partner with a sharp weapon.[105] Similarly, the original CTS presents the items that are least likely to generate social disapproval first (Straus et al., 2006).[106]

Prior to answering the section on partner violence, participants were provided with an introduction to the section, which was read out by a researcher (see Appendix A). This introduction served to provide clarity regarding the nature of the questions about to be asked, but also provided assurance to participants regarding the confidentiality of their responses, which aimed to encourage honesty. Participants were then asked to indicate, by marking an answer under one of the response categories, how many times in the previous year they had perpetrated any of the assaultive actions listed. A one year referent period coincides with the typical referent period used with the CTS (see footnote 103), but also coincides with the referent period used for other measures of moral rule-breaking behaviour (e.g. self-reported crime) used by PADS+ (see Wikström et al., 2012, Chapter 3).

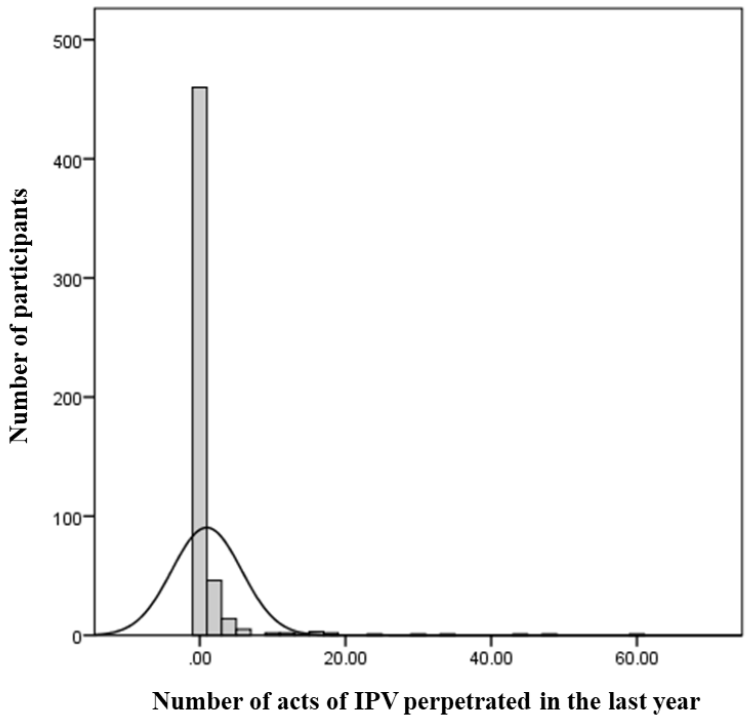
The measure of physical IPV adopted by PADS+ uses the same numeric response options as the CTS and CTS2; therefore, in this thesis I used the scoring method described by Straus and colleagues (Straus, 1979, 2004b; Straus et al., 1996) to generate a frequency score of IPV perpetration.[107] As noted, the PADS+ physical IPV scale contains eight items, therefore, the minimum possible score was 0 and the maximum possible score was 200. The Cronbach's alpha reliability coefficient for the scale was .71, which indicates adequate internal consistency. There

[105] Note that while the measure of physical IPV includes assaultive acts that vary in severity, the key outcome variable, and the focus of the research questions addressed in this thesis, is IPV frequency; therefore, I do not compare the perpetrators of IPV on the severity of their violence.

[106] The CTS2 presents items in a more random order, although the most severe violence items are still reserved for the end of the measure.

[107] Due to the scoring method, IPV frequency is not a true frequency count, therefore the frequency of IPV is referred to as a score (see also, Section 6.2.1 of Chapter 6). While the frequency score is not an exact frequency count and therefore may be less precise than a frequency count, the frequency scores still indicate the extent of IPV perpetration by the participants. It is also worth noting that even when participants are asked to report an exact number of times that they have committed a particular crime, such figures "are likely to have some imprecision" (Wikström et al., 2012, p. 110).

was no missing data for the IPV perpetration frequency measure.[108] The distribution is depicted in Figure 5.1.



N	541
Mean (SE)	.95 (.21)
Standard deviation	4.77
Median	.00
Mode	.00
Range	60.00
Skewness (SE)	8.28 (.11)
Kurtosis (SE)	79.74 (.21)

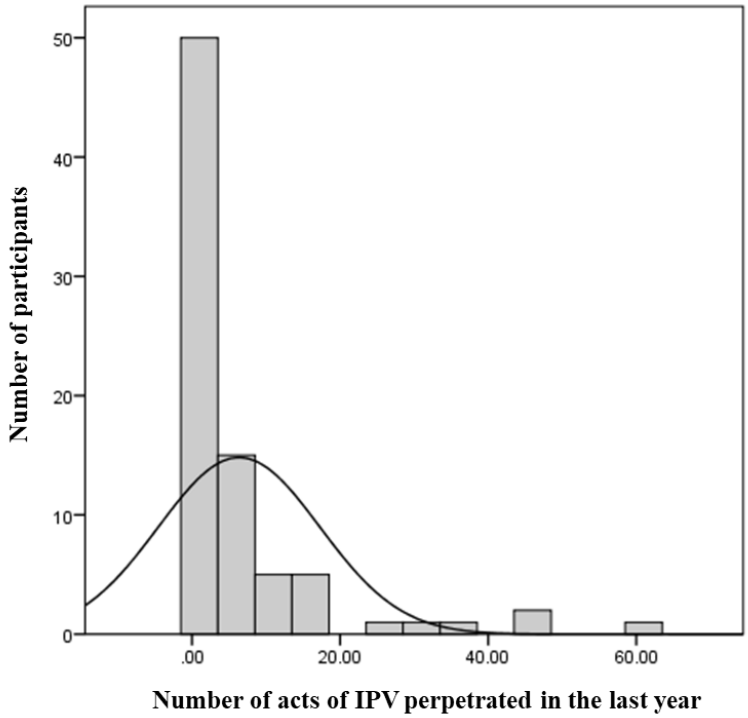
Figure 5.1. Distribution and descriptive statistics for IPV frequency score: All participants who had a partner in the last year

Inspection of the histogram and descriptive statistics depicted in Figure 5.1 clearly shows that the distribution of IPV frequency scores is non-normal with significant skewness and kurtosis. This is confirmed by the significant result from the Kolmogorov-Smirnov test, D (541) = .429, $p < .001$.[109] Further examination of the descriptive statistics shows the range of IPV perpetration frequency scores to be 60, thus the minimum frequency reported by participants was 0 and the maximum frequency reported was 60.[110] However, in line with the positive skew of the distribution, the mode of the scores is 0: 85% (n = 460) of the participants did not perpetrate any acts of violence against a partner in the preceding year. Likewise, the median of the distribution is 0 indicating that the IPV

[108] The lack of missing data is not unusual for PADS+ data, and is likely due to the interviewer-led method by which the questionnaire is administered (Hardie, 2017; Wikström et al., 2012).
[109] If the Kolmogorov-Smirnov test yields a statistically significant result it indicates that the distribution deviates significantly from normality (Field, 2005).
[110] None of the participants answered '20 or more times' for any of the items.

perpetration frequency scores cluster around the value of zero.[111] The positively skewed distribution of IPV perpetration frequency was to be expected: quantitative measures of IPV, such as the CTS, when administered to community samples, typically yield positively skewed distributions (e.g. Straus, 1979; Straus et al., 1996).

Due to the skewness of the IPV frequency score distribution, the histogram of all participants' scores does not give a clear picture of the distribution of scores for those participants who did report a prevalence of IPV. Therefore, in Figure 5.2, I have presented the distribution of IPV perpetration frequency scores for the 81 participants who reported perpetrating at least one act of IPV in the previous year.



N	81
Mean (SE)	6.36 (1.21)
Standard deviation	10.91
Median	2.00
Mode	1.00
Range	59.00
Skewness (SE)	3.14 (.27)
Kurtosis (SE)	10.53 (.53)

Figure 5.2 Distribution and descriptive statistics for IPV frequency score: Participants who reported a prevalence of IPV perpetration in the last year

[111] Note that I report all measures of central tendency alongside the histogram of the distribution for each measure used in this thesis. However, where a distribution is highly skewed, I concentrate on the median and mode as measures of central tendency within the text. This is because it is commonly accepted that the median and mode are less vulnerable to outliers than the mean is, and thus provide a more accurate picture of central tendency.

Inspection of Figure 5.2 shows the range of IPV perpetration frequency scores for participants who reported a prevalence of IPV in the previous year to be 59, whereby the minimum frequency reported was 1 and the maximum frequency was 60. However, the modal score was 1, which is reflected in the significant positive skew of the distribution, and most IPV perpetrators (79%, *n* = 64) had a frequency score of between 1 and 5. By contrast, only 7% (*n* = 6) of participants reported perpetrating more than twenty acts of IPV in the previous year. The skew of the distribution is also reflected in the difference between the values of the median (2.00) and the mean (6.36), whereby the mean is closer to the tail of the skew than the median.[112]

Finally, because an aim of this thesis is to examine the generalisability of SAT to explain male and female perpetrated IPV, Table 5.1 presents separate descriptive statistics of the IPV perpetration frequency scores for males and females.

Table 5.1. *Descriptive Statistics for IPV Perpetration Frequency: Comparison of Females and Males*

	Females	**Males**
N	54	27
Mean (SE)	7.30 (1.74)	4.48 (.98)
Standard deviation	12.81	5.08
Median	2.00	2.00
Mode	1.00	1.00
Range	59.00	16.00
Skewness (SE)	2.71 (.32)	1.82 (.45)
Kurtosis (SE)	7.12 (.64)	1.97 (.87)

[112] A caveat: Von Hippel (2005) observes that it is often considered a 'rule of thumb' that positive skew of a distribution is reflected by the mean being to the right of the median (i.e. the mean is closer to the tail of the skew than the median). However, Von Hippel (2005) presents evidence that this is not always the case: for example, where a distribution has a long tail at one end and the majority of scores are piled up at the other, the mean may be to the left of the median. An illustration of this example can be seen in the IPV perpetration frequency distribution for the whole sample, which is displayed in Figure 5.1 (although the mean and median are very close to one another).

Examination of Table 5.1 shows that 54 females and 27 males reported a prevalence of IPV perpetration in the previous year, thus showing a 'gender gap' in the prevalence of IPV perpetration in the female direction. Furthermore, comparison of the range for female and male IPV perpetration frequency scores is indicative of a gender gap in IPV perpetration frequency in the female direction: the range for the female participants is 59, while the range for the male participants is 16. Therefore, the participants who reported the highest IPV perpetration frequency scores (i.e. the frequency scores greater than 20) were female. Notwithstanding the 'gender gap' in IPV perpetration, the value of the mode of IPV perpetration frequency for males and females is the same: most male and female IPV perpetrators perpetrated one act of IPV in the previous year. Similarly, the median is the same for both males and females: on average, both male and female IPV perpetrators used two acts of violence against a partner in the previous year.

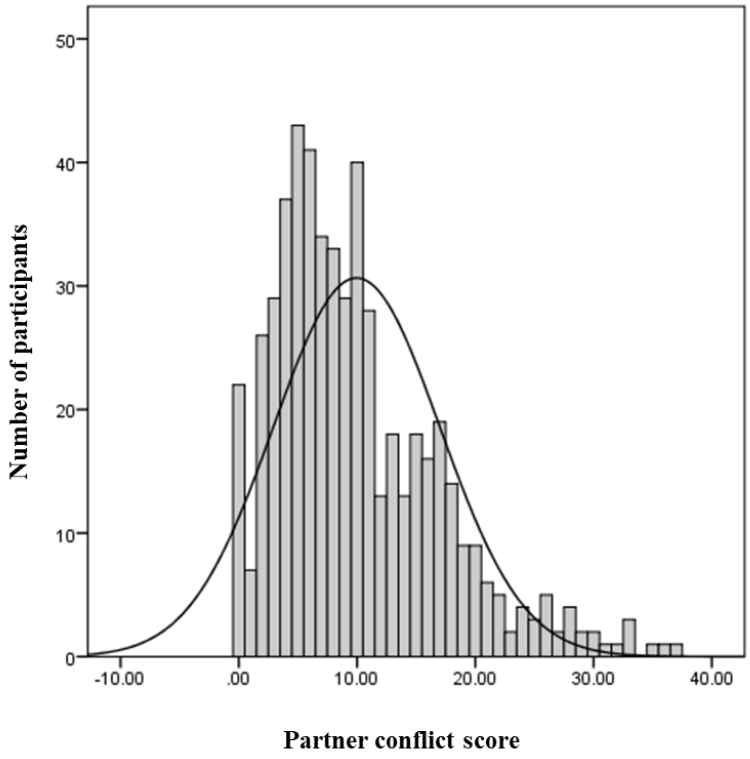
5.4.2 Partner Conflict

To measure frequency (level) of conflict in response to frictions within participants' intimate relationships, participants completed the PADS+ partner conflict measure. The PADS+ partner conflict measure is comprised of items describing reasons (frictions) why participants may have engaged in an argument or conflict with a partner (or partners) in the previous year. The PADS+ partner conflict measure has been administered since Wave 6 of data collection.

While the potential reasons for partner conflict are numerous (e.g. Straus et al., 2006 [1980]), IPV researchers have noted several themes of conflict that are common within intimate relationships, and which can act as antecedents of violence. As described in Chapter 4, IPV researchers have found that household chores, expectations about partner behaviour, sex, sexual jealousy and/or infidelity, social activities, money, and issues pertaining to children are common sources of partner conflict (Dobash & Dobash, 1984; Dobash & Dobash, 1979; Straus et al., 2006 [1980]; see further, Chapter 4). Accordingly, the PADS+ measure of partner conflict presents participants with a list of reasons for conflict (frictions) within intimate relationships, which cover many of the common sources of, or reasons for, partner conflict identified in the literature. Participants are then asked to indicate how often they had an argument or conflict with a partner in the previous year for these reasons. In total, the PADS+ partner conflict measure is comprised of 24 items: 12 referring to the participant's behaviour and 12 referring to the participant's partner's behaviour. For example, participants are asked how often they had an argument or conflict because they were 'flirting with

someone else' and then because their partner was 'flirting with someone else'. Response options are 'Never', 'Sometimes', 'Often (every month)', and 'Very often (every week)'; each response option corresponds to a numeric score between 0 and 3, whereby 0 corresponds with 'Never' and 3 corresponds with 'Very often'. The PADS+ partner conflict scale is reproduced in Appendix B.

To create a level of partner conflict score for use in this thesis, responses to all 24 items were summed, where the minimum possible score was 0 and the maximum possible score was 72. Only one participant had missing data for one item. If a participant has no more than two items of a scale with missing data, the PADS+ protocol is to impute the mean of the participant's scores from the other items of the scale. Accordingly, the missing value for the item was imputed following the PADS+ protocol. The Cronbach's alpha for the scale was .85. The histogram of the distribution and descriptive statistics are displayed in Figure 5.3.



N	541
Mean (SE)	9.96 (.30)
Standard deviation	7.04
Median	8.00
Mode	5.00
Range	37.00
Skewness (SE)	1.10 (.11)
Kurtosis (SE)	1.21 (.21)

Figure 5.3. Distribution and descriptive statistics for partner conflict frequency score

Inspection of the histogram and descriptive statistics depicted in Figure 5.3 shows that the skewness and kurtosis of the distribution is not as severe as for the distribution of IPV perpetration frequency. However, the skewness and kurtosis values of the distribution for partner conflict scores translate to significant positive skewness and kurtosis. The non-normality of the distribution is confirmed by the significant result from the Kolmogorov-Smirnov test, D (541) = .128, $p < .001$.

Further examination of the descriptive statistics shows that the range is 37, whereby the minimum partner conflict score in the sample was 0 (indicating no conflict) and the maximum score in the sample was 37 (indicting more frequent conflict). The value of the mean (9.96) indicates that on average, participants responded 'Never' or 'Sometimes' to most of the items on the partner conflict measure.[113] This is reflected by the value of the median (8.00), which is a more accurate measure of central tendency than the mean where a distribution is skewed.

5.4.3 Partner-Specific Friction Sensitivity

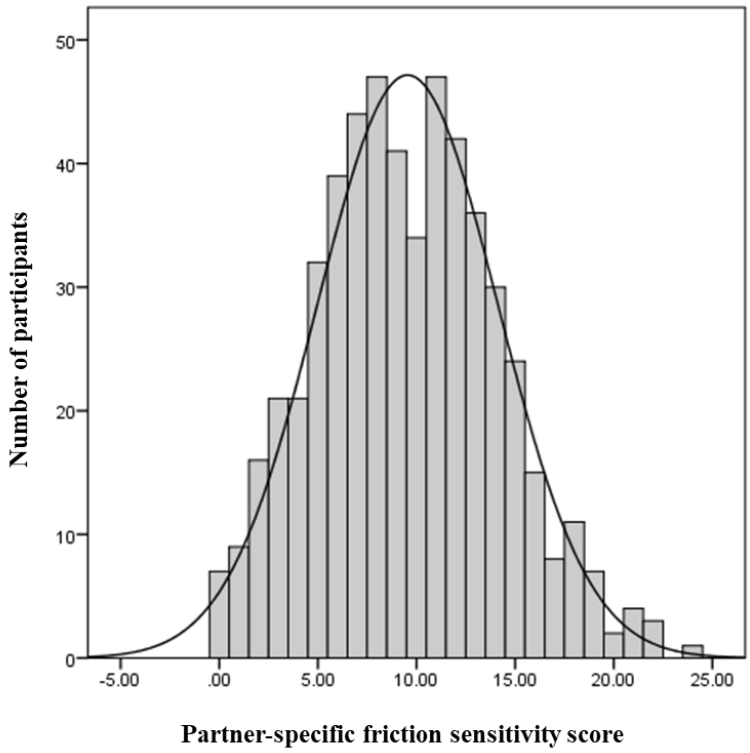
In Chapter 4, I delineated SAT's construct of friction sensitivity, which is the tendency for a person to experience the emotion of anger in response to frictions in the immediate environment (Wikström & Treiber, 2009). More specifically, friction sensitivity pertains to the intensity of anger experienced in response to frictions. To broadly capture individuals' friction sensitivity as conceptualised by SAT, for Wave 6, PADS+ researchers constructed a generalised measure of fiction sensitivity that asked respondents to indicate how angry they would be if they experienced various external frictions, such as a person jumping ahead in a queue. The original PADS+ friction sensitivity scale captured a person's general friction sensitivity; however, to reflect the suggestion of some IPV researchers that it is more meaningful to measure partner-specific anger rather than general anger in relation to IPV perpetration (Boyle & Vivian, 1996; Eckhardt et al., 1997; Holtzworth-Munroe, Rehman, et al., 2000), for Wave 8, the measure of friction sensitivity was adapted to be partner-specific. Therefore, the measure of friction sensitivity administered to PADS+ participants at Wave 8, and which was used in this thesis, was constructed to capture the SAT construct of friction sensitivity in relation to intimate partners.

The original PADS+ friction sensitivity scale was comprised of 16 items; to adapt the scale to measure partner-specific friction sensitivity, items from the original that were not considered

[113] The mean divided the number of items in the measure (9.96/24) results in a value of .42, which is in-between the score of 0 (never) and 1 (sometimes) for the scoring of each item in the measure.

amenable to adaptation such as ‘Something doesn’t work (e.g., computer, car, mobile phone)” and “I lose at something (e.g., sports, games, bets)” were removed from the scale. This left eight items that were adapted to be partner-specific; for example, an item from the original scale that asked a participant how angry he or she would be if a person told him or her what to do was adapted to ask how angry he or she would be if a partner told him or her what to do. The items of the partner-specific friction-sensitivity scale and the instructions given to participants are reproduced in Appendix C.

Response options for the partner-specific friction sensitivity scale were ‘Not at all angry’, ‘A little angry’, ‘Angry’, and ‘Very angry’. Each response option corresponded to a numeric score between 0 and 3, whereby 0 equated to ‘Not at all angry’ and 3 equated to ‘Very angry’. To generate a friction sensitivity score for use in this thesis, participants’ scores for all items of the scale were summed. The minimum possible score was 0 and the maximum possible score was 24, whereby a low score denoted low partner-specific friction sensitivity and a high score denoted high partner-specific friction sensitivity. The Cronbach’s alpha for the scale was .85, indicating good internal consistency. There was no missing data for the partner-specific friction sensitivity scale; the distribution of scores and descriptive statistics are presented in Figure 5.4.



N	541
Mean (SE)	9.55 (.20)
Standard deviation	4.58
Median	9.00
Mode	8.00
Range	24.00
Skewness (SE)	.23 (.11)
Kurtosis (SE)	-.24 (.21)

Figure 5.4. Distribution and descriptive statistics for partner-specific friction sensitivity score

From an initial inspection of the histogram and descriptive statistics depicted in Figure 5.4, it appears that the distribution of partner-specific friction sensitivity scores is reasonably normally distributed, without substantial skewness or kurtosis. Yet, the Kolmogorov-Smirnov test suggests that the distribution deviates significantly from normality, D (541) = .069, $p < .001$. It should be borne in mind that the Kolmogorov-Smirnov test is sensitive to large sample sizes, namely, a large sample is likely to yield a significant result even if the distribution is reasonably normal (Field, 2005). However, the significant Kolmogorov-Smirnov test result may reflect the bimodal nature of the distribution: while the descriptive statistics report a mode of 8.00, there is in fact a second mode of 11.00.

Further examination of the descriptive statistics shows that the range is 24, whereby the minimum partner-specific score in the sample was 0 (indicating extremely low partner-specific friction sensitivity) and the maximum score in the sample was 24 (indicting very high partner-specific friction sensitivity, and is the maximum possible score). The value of the mean (9.55) indicates

that on average, participants responded that they would be 'A little angry' when faced with the sources of friction listed in the PADS+ partner-specific friction sensitivity measure.[114]

5.4.4 Partner Cohesion

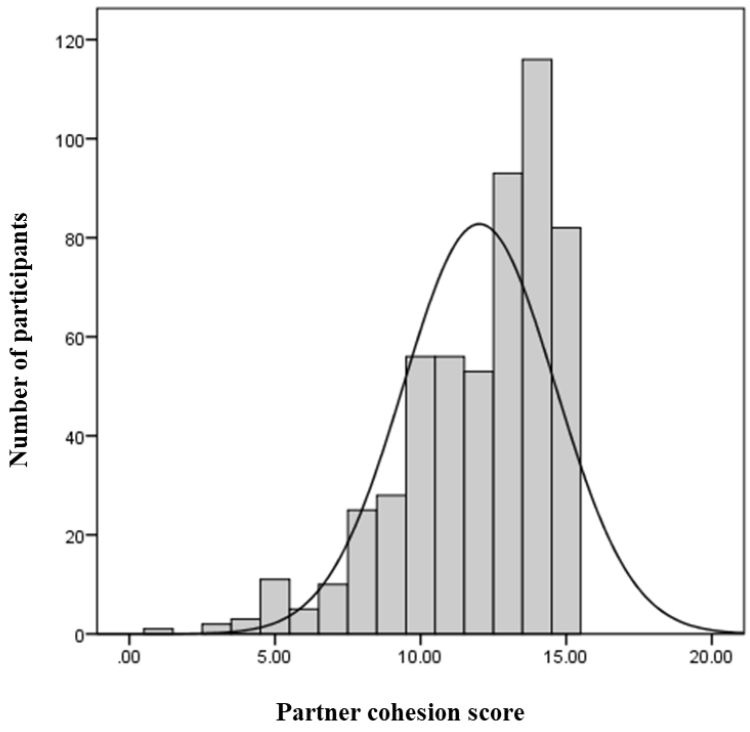
To capture participants' perception of trust, shared values, respect, and cooperation within their relationships, this thesis used data gathered by the PADS+ partner cohesion scale.[115] The items contained within the PADS+ measure of partner (or relationship) cohesion are very closely aligned with the items of the measure of social cohesion described by Sampson, Raudenbush, and Earls (1997). As noted in Chapter 4, social cohesion concerns the "mutual trust and shared expectations" of individuals living within the same community (i.e. neighbourhood) (Sampson, 2006, p. 37). In their seminal study, Sampson and colleagues (1997) measured social cohesion by asking participants questions about the extent to which people within their neighbourhood trusted each other, held the same values as each other, got along well with each other, were willing to help each other, and how 'close-knit' the neighbourhood was (see p. 920). At first glance, it may not seem clear how a measure of social cohesion is adaptable to measure partner cohesion. However, the core constructs of trust, shared values, and cooperation that are measured in the social cohesion scale correspond closely with relationship factors commensurate with partner cohesion, and which are relevant to IPV. For example, lack of trust (e.g. high levels of jealousy) within a relationship, and low levels of cooperative behaviour (e.g. not helping with household chores), are key contributors to relationship conflict and the use of violence (Capaldi et al., 2012; Dobash & Dobash, 1979, 1984; Dutton, Ginkel, & Landolt, 1996; Straus et al., 2006 [1980]).

It follows that the PADS+ partner cohesion scale is comprised of five statements pertaining to cooperation, respect, trust, arguments, and shared values between the participant and his or her partner. Participants are asked to indicate on a 4-point scale the extent to which they agree or disagree with each statement. Item scores vary between 0 and 3, where 0 corresponds with 'Strongly disagree' and 3 corresponds to 'Strongly agree'. One item in the scale is worded in a way

[114] The mean divided the number of items in the measure (9.95/8) results in a value of 1.2, which is closest to the item score of 1 ('A little angry').
[115] The partner cohesion scale was constructed by the PADS+ research team under the supervision Per-Olof Wikström for use in Wave 8 of PADS+.

that requires it to be reverse coded. The items of the partner cohesion scale and instructions given to participants are reproduced in Appendix D.

To create a partner cohesion score for use in this thesis, the scores of each item of the scale were summed for each participant. The minimum possible score was 0 and the maximum possible score was 15, whereby a low score translated to low partner cohesion and a high score corresponded to high partner cohesion. Cronbach's alpha for the scale was .82, indicating good internal reliability. There was no missing data; the distribution of the PADS+ partner cohesion scale along with descriptive statistics are presented in Figure 5.5.



N	541
Mean (SE)	12.02 (.11)
Standard deviation	2.61
Median	13.00
Mode	14.00
Range	14.00
Skewness (SE)	-1.07 (.11)
Kurtosis (SE)	.96 (.21)

Figure 5.5. Distribution and descriptive statistics for partner cohesion score

Visual inspection of the histogram in Figure 5.5 shows that the distribution of partner cohesion scores is negatively skewed: the majority of participants reported medium to high levels of partner cohesion, and very few reported low levels of partner cohesion. The non-normality of the distribution is further established by the skewness and kurtosis values of the distribution, which are

commensurate to significant negative skewness and significant positive kurtosis. The Kolmogorov-Smirnov test for the partner cohesion scale was also significant: D (541) = .185, $p < .001$.

The value of the range is 14, whereby the minimum partner cohesion score in the sample was 1 (indicating very low partner cohesion) and the maximum score in the sample was 15 (indicting very high partner cohesion). The most frequent score was 14 and the value of the median is 13; taken together these measures of central tendency indicate that participants generally reported rather high levels of partner cohesion.

5.4.5 IPV-Specific Moral Rules Scale

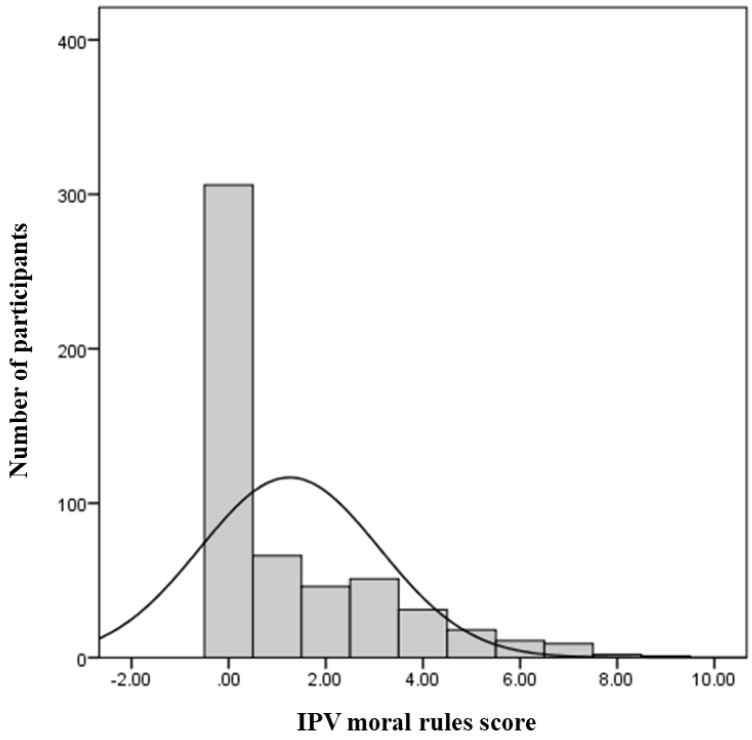
To capture personal moral rules, PADS+ uses a generalised moral rules scale, which is "a modified version of the pro-social values scale used by Rolf Loeber in the Pittsburgh Youth Study" (Wikström et al., 2012, p. 132). The moral rules scale is considered a generalised measure of individuals' moral rules because it seeks to capture respondents' general view of the seriousness of moral rule-breaking (Wikström et al., 2012). The PADS+ generalised moral rules scale presents respondents with a series of moral infractions (i.e. moral rule-breaking actions), which vary in their seriousness and criminality, and asks the respondents to indicate on a four-point scale how wrong or not wrong they consider it to be for a person their age to engage in each of the rule-breaking behaviours (Wikström et al., 2012). Response options are 'Very wrong', 'Wrong', 'A little wrong', and 'Not wrong at all', whereby a response of 'Very wrong' corresponds with a value of 3, and a response of 'Not wrong at all' corresponds with a score of 0.

As with all sections of the PADS+ interviewer-led questionnaire, prior to completing the moral rules scale, participants are given an introduction to the section. To avoid ambiguity regarding participants' perceptions of morality and moral behaviour, participants are not asked about the morality of the behaviours in the scale, but are asked about how wrong or not wrong they consider the behaviours to be. Providing this introduction ensures that the moral rules scale captures SAT's characterisation of morality, namely rule-breaking propensity (see Chapter 2).

The original PADS+ generalised moral rules scale was comprised of 16 items, and was used throughout PADS+ Waves 1-5. Further detail on the original PADS+ generalised moral rules scale can be found in Wikström and colleagues (2012, p. 132-135). From Wave 6 onwards, some additional items were added to the moral rules scale to tap into more action-specific morality. At

Wave 6 an item regarding violence towards an intimate partner was added to the generalised moral rules scale, and at Wave 8, two additional items regarding violence towards an intimate partner were added. Therefore, within this thesis, the construct of IPV-specific moral rules was captured by participants' responses to the three IPV-specific items of the revised generalised moral rules scale administered at Wave 8. The measure is reproduced in Appendix E.

To create an IPV-specific moral rules score, each item was reverse-coded so that low scores denoted strong morality. Items were reversed coded to be comparable with the way in which morality scores are transformed and analysed in PADS+ publications (Wikström et al., 2012, p. 137). Item scores were then summed to create an IPV-specific moral rules score for each participant. The minimum possible score was 0 and the maximum possible score was 9. The Cronbach's alpha for the scale was .81, which is very good considering that the scale is only comprised of three items (Cortina, 1993). There was no missing data; the distribution and descriptive statistics for the IPV-specific moral rules scale are presented in Figure 5.6.



N	541
Mean (SE)	1.26 (.08)
Standard deviation	1.85
Median	0.00
Mode	0.00
Range	9.00
Skewness (SE)	1.53 (.11)
Kurtosis (SE)	1.72 (.21)

Figure 5.6. Distribution and descriptive statistics for IPV moral rules score

Review of the histogram and descriptive statistics depicted in Figure 5.6 reveals that the distribution of IPV-specific moral rules scores is non-normal with significant skewness and kurtosis. This is confirmed by the significant result from the Kolmogorov-Smirnov test, D (541) = .317, $p < .001$. Further examination of the descriptive statistics shows the range of IPV-specific moral rules scores to be 9.00, thus the minimum score within the sample was 0, and the maximum score was 9. The mode of the scores is 0: 56.6 % (n = 306) of the participants responded 'Very wrong' to all items of the IPV-specific moral rules scale. Similarly, the median of scores is 0, indicating that the preponderance of participants' IPV-specific moral rules scores are at the strong morality end of the spectrum.

5.4.6 IPV-Specific Moral Emotions

To measure participants' moral emotions in relation to IPV, this thesis used data taken from the separate guilt and shame scales administered as part of the PADS+ interviewer-led questionnaire. As with the moral rules scale, the guilt and shame scales are considered general measures of the strength of respondents' shame and guilt in relation to moral rule-breaking (Trivedi-Bateman, 2014). While it is observed that guilt and shame are often conflated (e.g. Svensson et al., 2013; Trivedi-Bateman, 2014, see further, Chapter 2), the guilt and shame scales were developed by Wikström to capture SAT's characterisation of guilt and shame. As with all other measures, prior to completing the guilt and shame scales, participants are provided with an introduction to the section and a definition of guilt and shame (these instructions can be found in Appendix F).

In accordance with the characterisation of shame being a 'public' moral emotion (Tangney et al., 2007; see further, Chapter 2), the shame scale asks participants how ashamed they would feel if they committed various acts of moral rule-breaking and other people found out. Accordingly, participants answer separate questions about how ashamed they would feel in front of their best friends, their boss or teacher, and their parents, for each moral rule violation in the scale. Therefore, for each moral rule violation, participants answer three questions about how ashamed they would feel. Response options are recorded on a three-point scale from 'Not at all', to 'Yes, a little', to 'Yes, very much'. The numeric scores for each response vary from 0 for 'No, not at all' to 2 for 'Yes, very much'.

The shame scale has been administered to participants since Wave 2 of PADS+, and between Waves 2 and 7, participants were asked about how ashamed they would be if they were caught

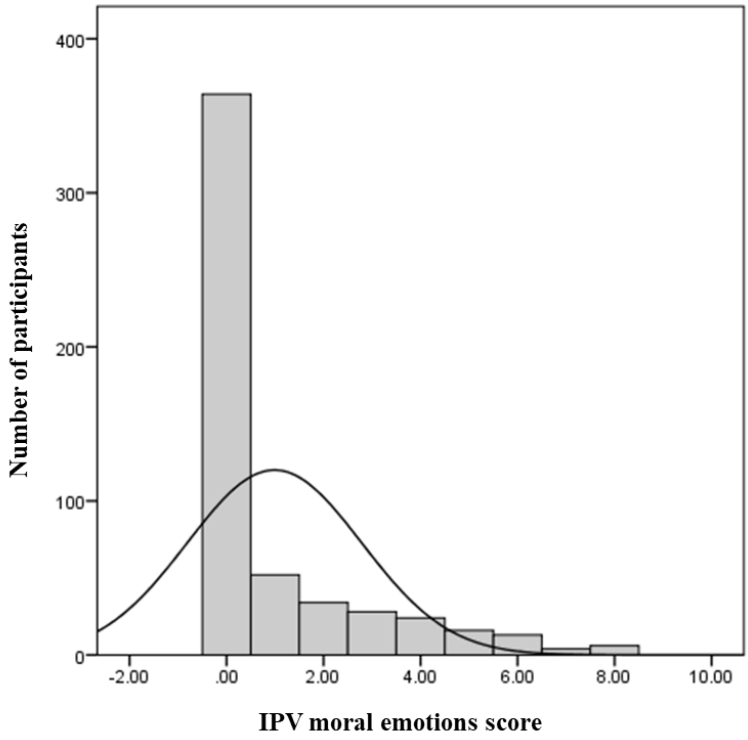
shoplifting, and if they were caught breaking into a car. At Wave 8, an item asking participants how ashamed they would be if they committed an act of violence against a partner was added.[116] The exact wording of the instructions provided to participants and the wording of the items are provided in Appendix F. Following the response format of the existing items of the shame scale, participants provided three answers relating to IPV-specific shame: how ashamed they would feel if their best friends, their boss or teacher, and their parents found out that they had been violent towards a partner. Therefore, participants could have an IPV-specific shame score between 0 and 6.

Guilt is considered a more private emotion (Tangney et al., 2007; see further, Chapter 2), therefore the guilt scale used by PADS+ simply asks participants how guilty they would feel if they broke moral rules, from minor infractions such as cheating on a test to more serious infractions such as shoplifting. As with the shame scale, the guilt scale has been administered to PADS+ participants since Wave 2. The original guilt scale was comprised of six items, and asked participants to indicate how guilty they would feel on a three-point scale: 'No, not at all', 'Yes, a little', and 'Yes, very much'. Again, as with the shame scale, the numeric scores for the guilt scale ranged from 0 for 'No, not at all' to 2 for 'Yes, very much'. At Wave 8, an item asking participants how guilty they would feel if they hit a partner for lying to them was added to the guilt scale. Accordingly, this single item was used in this thesis to measure IPV-specific guilt, and participants could have a score between 0 and 2.

While guilt and shame are two distinct moral emotions, within the SAT framework, anticipatory guilt and shame work together to strengthen adherence to moral rules (Wikström et al., 2012). Accordingly, this thesis is concerned with measuring the overarching construct of IPV-specific moral emotion, namely individuals' IPV-specific guilt and shame. Therefore, the construct of IPV-specific moral emotion was measured as a composite of participants' scores on the IPV-specific items of the shame and guilt scales. To create a composite IPV-specific moral emotions score, the IPV-specific guilt and shame scores were reverse coded so that a high score denoted weak guilt and weak shame. Then, because the scoring of the guilt and shame scales are the same, the guilt and shame scores were simply added together to create a composite score. Thus, the resulting IPV-moral emotions scale was comprised of four items. The minimum possible IPV-specific moral emotions score was 0 (indicating strong IPV-specific moral emotion) and the maximum possible

[116] At Wave 8, an item about general violence was also added to the shame scale.

score was 8 (indicating weak IPV-specific moral emotion). The Cronbach's alpha was .87, which shows very good internal reliability for a scale with so few items (Cortina, 1993). There was no missing data; the distribution of the IPV-specific moral emotions scale and the descriptive statistics are shown in Figure 5.7.



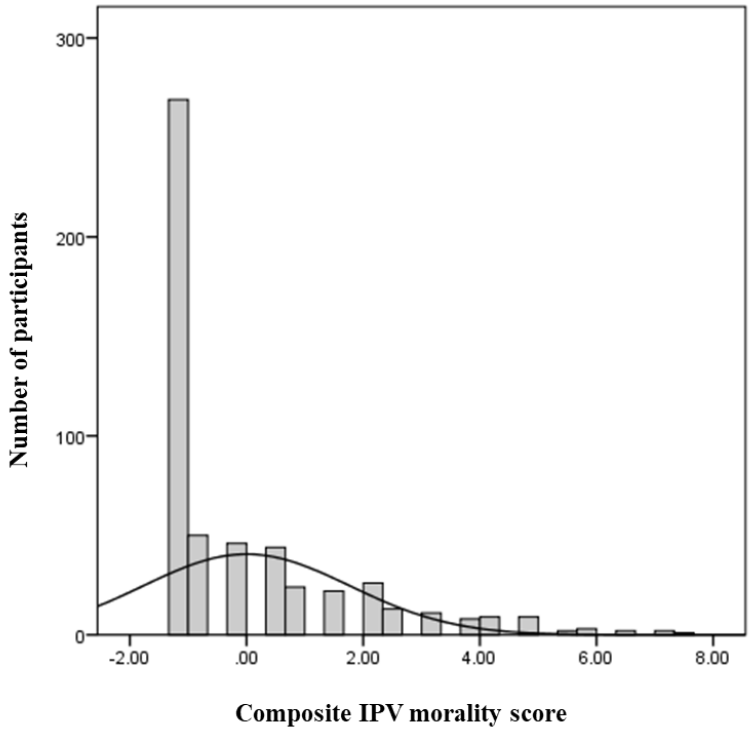
N	541
Mean (SE)	.99 (.08)
Standard deviation	1.80
Median	.00
Mode	.00
Range	8.00
Skewness (SE)	1.98 (.11)
Kurtosis (SE)	3.25 (.21)

Figure 5.7. Distribution and descriptive statistics for IPV moral emotions score

Figure 5.7 reveals that the distribution of IPV-specific moral emotions scores is non-normal with significant skewness and kurtosis. This is confirmed by the significant result from the Kolmogorov-Smirnov test, D (541) = .381, $p < .001$. Further examination of the descriptive statistics shows the range of IPV-specific moral emotion scores to be 8.00, thus the minimum score within the sample was 0, and the maximum score was 8. However, the mode of the scores is 0: 67.3 % (n = 364) of the participants responded 'Yes, very much' to all items of the IPV-specific moral emotions scale. Similarly, the median of scores is 0, indicating that the preponderance of participants have IPV-specific moral emotions scores indicative of strong IPV-specific guilt and shame.

5.4.7 IPV morality: A Composite of Moral Rules and Moral Emotions

As described in Chapter 2, SAT's construct of personal morality is a composite of a person's personal moral rules and moral emotions (Wikström et al., 2012). Indeed, a Spearman's correlation indicates that IPV-moral rules and IPV-moral emotions are strongly correlated, $r = .56$, $p < .001$ (one-tailed). To construct a generalised measure IPV-specific morality (hereafter referred to as IPV morality) for use in this thesis, the scores for the IPV-specific moral rules scale and the IPV-specific moral emotions scale were transformed into z-scores before being summed together to create a composite IPV morality score.[117] In accordance with the direction of the scoring applied to the separate moral rules and moral emotions scales, low scores on the IPV morality composite measure denote strong IPV morality and high scores denote weak IPV morality. The distribution and descriptive statistics for the composite IPV morality scale are presented in Figure 5.8.



N	541
Mean (SE)	.00 (.08)
Standard deviation	1.77
Median	-.69
Mode	-1.3
Range	8.77
Skewness (SE)	1.69 (.11)
Kurtosis (SE)	2.47 (.21)

Figure 5.8. Distribution and descriptive statistics for composite IPV morality score

[117] Note that the because the moral emotions and moral rules measures use different response scales, scores were standardised by being transformed into z-scores before being summed to create the IPV morality composite score.

Reflecting the distributions of the IPV-specific moral rules and the IPV-specific moral emotions scales, the distribution of the composite IPV morality scores shown in Figure 5.8 has significant positive skewness and kurtosis. While participants' IPV morality scores range widely from -1.23 to 7.55, most participants' IPV morality scores were clustered at the left of the distribution (indicative of strong IPV morality), with few scores in the right tail of the distribution (indicative of weak IPV morality).

5.5 Study Sample, Design, and Data Collection: Summary

Within this chapter I have given an overview of PADS+, the study from which the data analysed in this thesis is taken. I have described the method of sample selection utilised by PADS+ in order to generate a representative community sample of young people (now young adults) in the UK. I then delineated how the key demographic characteristics of the PADS+ sample at Wave 8, namely age and sex, make the sample relevant for the study of IPV within the context of the SAT framework. I have also described the interviewer-led method used by PADS+ to administer the PADS+ questionnaire, and the specific measures that were administered within the PADS+ questionnaire at Wave 8 to capture the behaviours and theoretical constructs of interest to this thesis: IPV perpetration, relationship conflict, partner-specific friction sensitivity, partner cohesion, and IPV morality. All measures have good internal reliability, and all are significantly skewed with the exception of the partner-specific friction sensitivity scale, which is only marginally skewed. In the following chapter (Chapter 6), I show how the behaviours and constructs captured by the measures described in this chapter form the theoretical model to be tested, and the research questions to be answered in Chapter 7. In the following chapter, I also describe the analytical strategy that underlies the analyses described and the results reported in Chapter 7.

6: Analytical Strategy

Within this chapter I delineate the analytical strategy adopted in this thesis. I begin by providing an overview of the theoretical model to be tested, and the research questions that will be answered in Chapter 7. Subsequently, I detail the statistical method utilised in this thesis in order to test the theoretical model and answer the research questions: path analysis. I begin with an introduction to path analysis, and the process of selecting an appropriate estimation method and assessing model fit. I then describe the technique of multiple-group path analysis, which is used within this thesis to assess both moderated mediation and simple moderation effects. I conclude with a note on two methodological factors that impact interpretation of the analyses presented in Chapter 7: level of analysis and temporal order of variables.

6.1 The Theoretical Model: An Overview

In the following chapter (Chapter 7), I develop and test a theoretical model based upon the suppositions of SAT, to explain why some individuals are moved to commit acts of violent moral rule-breaking against an intimate partner. Figure 6.1 depicts the core of the theoretical model to be tested.

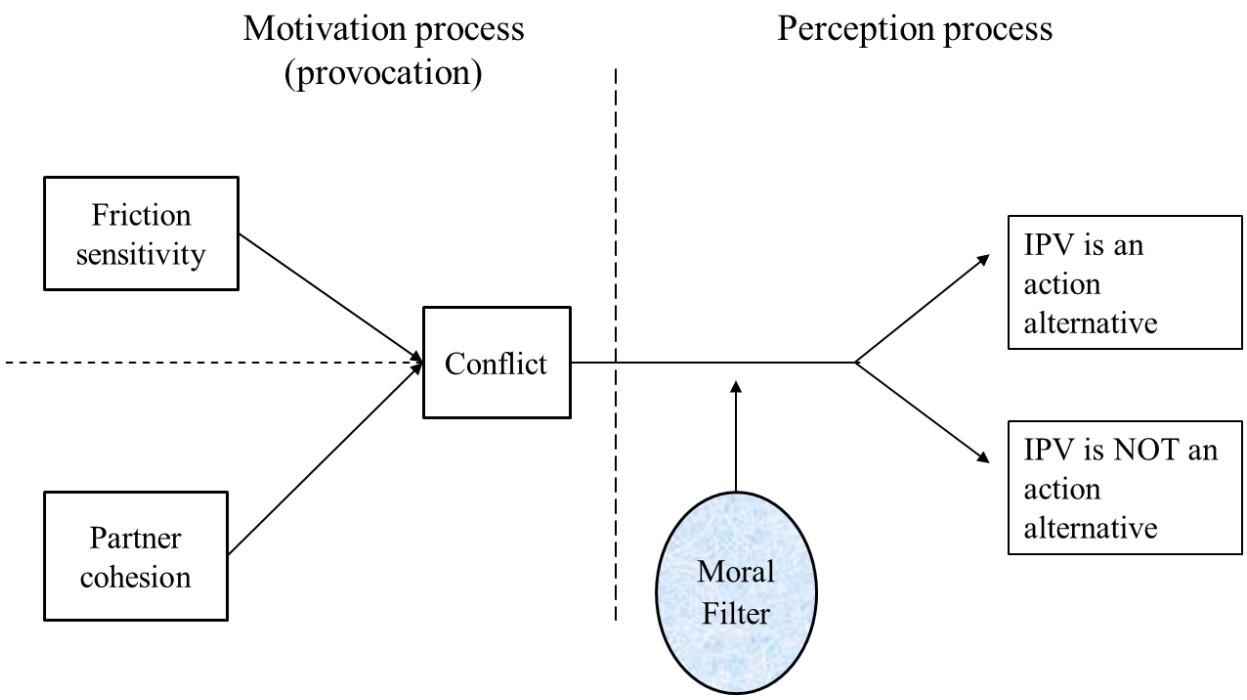


Figure 6.1. The theoretical model to be tested

Note. Friction sensitivity denotes partner-specific friction sensitivity. For brevity, in Chapter 6 and Chapter 7, all figures follow this rule.

One of the principal aims of this thesis is to assess the generalisability of the situational action theory (SAT) framework to acts of intimate partner violence (IPV). However, a corresponding aim is to draw upon and incorporate relevant knowledge from the IPV literature. In particular, this research includes the variables of partner-specific friction sensitivity, partner cohesion, and partner conflict. Partner-specific friction sensitivity directly measures the construct of friction sensitivity defined within the motivational process of provocation specified in SAT (Wikström, 2006;

Wikström & Treiber, 2009; see Chapter 4), and aligns with the recommendation by some IPV scholars that measures of partner-specific anger may be more appropriate than measures of general anger when studying the relationship between anger and IPV (Boyle & Vivian, 1996; Eckhardt et al., 1997; see Chapter 4). The variable of partner cohesion represents individuals' perception of mutual trust, respect, and shared values within their relationship/s, and aligns with IPV research which finds that themes such as jealousy and lack of trust are common antecedents of IPV (e.g. Langhinrichsen-Rohling et al., 2012; see further, Chapter 4). Similarly, research has highlighted that conflict within relationships is a key precursor of partner violence (e.g. Straus et al., 2006 [1980]), and is often associated with the experience of negative emotion (Winstok, 2008).

In Chapter 5, I described how the core constructs that are examined within this thesis were captured. From studying Figure 6.1, one can begin to see how these constructs, in addition to the construct of IPV morality, form the theoretical model of IPV moral rule-breaking to be tested. Within this thesis, and the analyses presented in the next chapter (Chapter 7), partner cohesion and partner-specific friction sensitivity represent components of the process leading to partner conflict, whereby partner conflict represents the motivation (experience of provocation) to engage in violence against a partner. Accordingly, partner conflict signifies the instigation of the perception-choice process, which is the causal process leading to action in the SAT framework. Thus, it is between experiencing partner conflict and perpetrating an act of IPV (or not), that morality is posited to exert its influence by guiding people's perception towards or away from IPV as an action alternative.[118]

6.1.1 Research Questions

To test the theoretical model depicted in Figure 6.1, the following research questions are posed:[119]

1. Do high partner-specific friction sensitivity and low partner cohesion translate into high frequency of IPV perpetration by influencing the level (frequency) of partner conflict?

[118] Of course, as described in Chapter 3, the perception-choice process in SAT is comprised of more than personal morality; however, this research is concerned with examining the specific role of morality in IPV.
[119] Please note that in this section I provide an overview of the research questions to be addressed in this thesis. Fuller description and explanation of the research questions is provided as they are addressed throughout the following chapter.

This first question will be answered by analysing the sample as a whole; the ensuing second and third research questions address the generalisability of the model across males and females. As described in earlier chapters, whether IPV is perpetrated predominantly by males against females, or by both males and females at approximately equal rates, is a highly contentious issue (e.g. Straus, 1999). Relatedly, some IPV researchers contend that understanding male and female IPV perpetration should take a 'gendered perspective' (e.g. Mennicke & Wilke, 2015). Likewise, some criminologists question whether theories of crime, many of which have been developed to explain crime committed by males, can be equally applicable to female offending (Daly & Chesney-Lind, 1988; Klein, 1973; Simpson, 1989). However, SAT is a theory that has been developed to explain why people commit acts of crime irrespective of whether the perpetrator is male or female (Wikström, 2011). For SAT, the explanatory process underlying moral rule-breaking should hold for males and females (Hirtenlehner & Treiber, 2017; Wikström, 2011).

As shown in Chapter 5, both males and females in the sample reported perpetrating acts of IPV in the previous year; moreover, females perpetrated more acts of IPV than males did. Accordingly, the following questions will be considered:

2. If high partner-specific friction sensitivity and low partner cohesion translate into high frequency of IPV perpetration by influencing the level (frequency) of partner conflict, does this pattern hold for males and females? If so,
    2.1. Are the indirect relationships from partner-specific friction sensitivity to IPV perpetration, and from partner cohesion to IPV perpetration, stronger for females than males?

The second stage of the analysis examines the role of personal IPV morality in explaining acts of IPV. The first question addresses the more global influence of morality on the indirect paths to IPV perpetration depicted in the model, and the second question examines the more specific role of morality between the experience of conflict (motivation) and the perpetration of IPV (moral rule-breaking):

3. Are the indirect relationships from partner-specific friction sensitivity and partner cohesion to IPV perpetration stronger for individuals with weak IPV morality than individuals with strong IPV morality?

4. Is the relationship from partner conflict to IPV frequency stronger for individuals with weak IPV morality than for individuals with strong IPV morality? Namely, are individuals with weak IPV morality more likely to perpetrate acts of IPV when frequently engaged in conflict with a partner compared to individuals with strong IPV morality?

Next, to explore whether differences in the number of males and females with strong and weak IPV morality contributes to the gender gap in IPV perpetration described in Chapter 5, I address the following question:

5. Is the proportion of females with weak IPV morality significantly greater than the proportion of males with weak IPV morality?

Finally, to assess the generalisability of the role of IPV morality across males and females, the following research questions are addressed:

6. Does the influence of IPV morality on the indirect relationships from partner-specific friction sensitivity to IPV perpetration, and from partner cohesion to IPV perpetration hold for males and females? If so,
   6.1. Is the strength of the indirect relationship from partner-specific friction sensitivity to IPV perpetration, and the indirect relationship from partner cohesion to IPV perpetration similar for weak IPV morality males and females?
   6.2. Is the strength of the indirect relationship from partner-specific friction sensitivity to IPV perpetration, and the indirect relationship from partner cohesion to IPV perpetration similar for strong IPV morality males and females?

7. Does the moderating influence of IPV morality from partner conflict to IPV perpetration hold for males and females? If so,
   7.1. Is the strength of the relationship from partner conflict to IPV perpetration similar for weak IPV morality males and females?
   7.2. Is the strength of the relationship from partner conflict to IPV perpetration similar for strong IPV morality males and females?

6.2 Path Analysis

To answer the research questions set out in Section 6.1, I use path analysis. Path analysis is one technique that falls under the umbrella of structural equation modelling (SEM), whereby multiple structural (regression and correlation) paths between observed variables can be hypothesised in the form of a path model, and tested concurrently (Byrne, 2012; Hox & Bechger, 1998; Kline, 2012; Lei & Wu, 2007). It follows that path models are especially associated with theory testing because they provide an elegant method for testing the hypothesised relationships between components of a theory within one statistical model (Hayduk et al., 2007; Hu & Bentler, 1999).[120]

In order to test a theoretical model using path analysis, the researcher must begin by specifying the regression and correlation paths of the model, namely how the observed variables of the model are posited to be related to each other (R. H. Hoyle, 2012). Following the specification of the model, but prior to running the model, it is necessary to select an appropriate estimation method, namely, the method used by the SEM programme to analyse the equations of the model (Kline, 2011). There are many types of estimator, and selecting the most appropriate one will depend on factors such as whether the dependent variable is continuous or categorical, a count or a score, skewed or normally distributed (Kline, 2011; Muthén & Muthén, 1998-2017). Accordingly, I next describe the process by which the estimation method for the path models reported in Chapter 7 was selected.

6.2.1 Selecting an Estimation Method

The outcome variable of concern in this thesis is *frequency* of IPV perpetration, namely, can the theoretical model explain differences in the extent to which individuals are violent towards a partner? However, as illustrated in Chapter 5, the outcome variable of IPV frequency is positively skewed. Within criminology, a positively skewed dependent variable is not unusual, particularly with regard to self-reported crime data: researchers are often faced with positively skewed data in which most respondents have a low frequency of self-reported crime, namely zero-inflated data

[120] However, a caveat should be born in mind. Structural path models are often specified in order to test a causal theory, yet, it does not necessarily follow that the hypothesised model is a genuine causal model (Hox & Bechger, 1998; Kline, 2012). Indeed, while one hypothesised model may appear to sufficiently fit with the data, it does not mean that other hypothesised models will not fit the data well also (Williams, 2012). Therefore, caution should be used before claiming that the findings of a path model prove a causal relationship.

(Osgood, Finken, & McMorris, 2002). It follows that skewed data violates the assumption of normality inherent in linear regression models (Field, 2005).

In statistics textbooks, transformation of data (i.e. log transformation, square root transformation, or reciprocal transformation) is often heralded as a suitable remedy to reduce the positive skew of a distribution (e.g. Field, 2005). Similarly, Osgood, Finken and colleagues (2002) advocate the use of data transformation using a method of data scaling from item response theory (IRT) (see Osgood, McMorris, & Potenza, 2002), or log transformation, followed by the application of a Tobit regression model (which allows for positively skewed i.e. left censored data) to the transformed distribution. However, using a data transformation technique does not necessarily reduce the skew of the data sufficiently to result in a normal distribution (Feng et al., 2014; O'Hara & Kotze, 2010) - as is the case with the IPV frequency variable used in this thesis. Yet, data transformation is not always used with the expectation that the distribution will become normal. For example, Osgood, Finken and colleagues (2002) acknowledge that transformation of positively skewed data (using either IRT scaling or log transformation) often does not produce a normal distribution, but when used with a Tobit model, results in a dependent variable with "an interpretable range that would be lost or distorted in least squares analysis" (p. 327). Thus, data transformation can be used to alter the scale in order to improve the interpretability of data.

Yet, some scholars have raised theoretical and empirical concerns about the use of data transformation techniques. For example, Feng and colleagues (2014) demonstrate how the log-transformation of data can distort the meaning of the original data. Similarly, Grayson (2004) notes that transformation of data can obscure the original meaning of the data to the extent that it results in the statistical inference of "an empirical construct *different* from that we set out originally to measure" (p. 112; emphasis in original). However, Grayson (2004) cautions that his comments should not be interpreted as a complete condemnation of data transformation, but rather as a cautionary tale: "Transformation made only for statistical reasons can have the unfortunate consequence of 'disconnecting' observed effects from what empirical meaning our raw units have" (p. 113). In consideration of the shortcomings of data-transformation, the decision was taken *not* to transform skewed data within this thesis.[121]

[121] An alternative to transforming the distribution of a skewed outcome variable is to transform it into a categorical variable, and employ a probit or logit regression method. For example, in this thesis the outcome variable of the path model would become IPV prevalence. However, as noted, the theoretical focus of the path model tested within this

Rather than transform skewed data, some scholars suggest using methods such as Poisson or negative binominal regression, which can be used with positively skewed distributions (Gardner, Mulvey, & Shaw, 1995; O'Hara & Kotze, 2010). Poisson and negative binominal regression models (including the zero-inflated versions) assume that the dependent variable represents count data (Gardner et al., 1995; Osgood, Finken, et al., 2002), for example that the value of 10 corresponds with 10 acts of violence. The use of Poisson regression requires that the mean and variance of the distribution are equal, if this assumption is not met, namely the variance is greater than the mean, the distribution is said to be "overdispersed" and can produce inaccurate results (Gardner et al., 1995; Osgood, 2000; Ver Hoef & Boveng, 2007). In such cases a negative binominal model, which does not assume that the mean and variance of the distribution are equal, may be more suitable (Gardner et al., 1995; Osgood, 2000; Ver Hoef & Boveng, 2007).

However, for the current research, the use of Poisson or negative binominal regression models was not considered appropriate. The measure of IPV perpetration frequency used within this thesis is not strictly a count of the number of times a participant committed an act of partner violence in the last year. Rather, as described in Chapter 5, the measure of IPV perpetration uses response categories, for example "3-5 times", which were translated into a number (count) by using the middle value of each category. These pseudo count values were then summed to create a frequency *score*. Therefore, it was decided that because the IPV frequency variable is not a true count variable, the use of Poisson or negative-binominal regression would not be appropriate for analysing the data within this thesis.

An alternative method, utilised by a number of researchers who have carried out tests of SAT, is an ordinary least squares (OLS) multiple regression model with non-transformed skewed data, but with the inclusion of 'robust' (i.e. heteroskedasticity-consistent) standard errors (see Hirtenlehner, Pauwels, & Mesko, 2015; Svensson & Oberwittler, 2010). Robust standard errors are more correctly referred to as heteroskedasticity-consistent standard errors, because they provide a more

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thesis is how the relationship between friction sensitivity, partner cohesion, partner conflict and IPV morality influence the *extent* to which individuals perpetrate violence. For example, the assumption underlying the path model is not that individuals with low friction sensitivity, high partner cohesion, low partner conflict, and strong IPV morality are immune to IPV perpetration, but that they are less likely to perpetrate IPV than those with high friction sensitivity, low partner cohesion, high partner conflict and weak morality. Therefore, dichotomising the outcome variable was not considered appropriate for the main analyses, but is used in preliminary analyses.

precise estimate of the standard error (and thus the p-value) when the assumption of homoscedasticity has been violated (Hayes & Cai, 2007).

Similarly, within this thesis I have adopted a 'corrected normal theory method' (Kline, 2011), whereby a robust maximum likelihood (MLR) method with non-normal data is used.[122] The SEM software that I used to perform the path analyses reported in this thesis was 'Mplus Version 7 Demo' (Muthén & Muthén, 1998-2017);[123] the MLR estimator in Mplus provides "maximum likelihood parameter estimates with standard errors and a chi-square test statistic … that are robust to non-normality" (Muthén & Muthén, 1998-2017, p. 668). The corrected chi-square test statistic used with the MLR estimator is considered "asymptotically equivalent" to the Yuan-Bentler (Yuan & Bentler, 2000) scaled chi-square test statistic (Muthén & Muthén, 1998-2017, p. 668) The robust standard errors produced from analysis using the MLR estimator are heteroskedasticity-consistent standard errors calculated using a sandwich estimator (Muthén & Muthén, 1998-2017), namely they are 'Huber-White standard errors'.[124]

6.2.2 Assessing Model Fit

Following the specification of the hypothesised model and the selection of an appropriate estimation method, the hypothesised model must be assessed for how well it fits the data (Lei & Wu, 2007; West, Taylor, & Wu, 2012). It is only if a model provides an adequate fit to the data that parameter estimates can be reliably interpreted (Kline, 2011; Lei & Wu, 2007). However, evaluating model fit is not a straightforward task: there are the numerous model fit statistics and indices that are available, and SEM software programmes vary in the model fit statistics that are reported (Hox & Bechger, 1998; West et al., 2012; Yuan, 2005). Moreover, there is contention amongst scholars regarding which model fit statistic/s should be used, and how strictly one should abide by the results (e.g. Barrett, 2007; Hayduk et al., 2007; McIntosh, 2007; West et al., 2012). Relatedly, model fit test statistics do not necessarily provide a consistent outcome, that is, the value

[122] Note that "the ML [maximum likelihood] estimation method is the default in most SEM computer programs, and most structural equation models described in the literature are analysed with this method" (Kline, p. 154).
[123] The demo version of Mplus is the free version of the software, but limits analysis to two independent and six dependent variables.
[124] Heteroskedasticity-consistent standard errors are often referred to as 'robust standard errors' or 'Huber-White standard errors'. The term 'Huber-White standard errors' corresponds with the names of two authors who wrote highly influential papers on heteroskedasticity-consistent standard errors (see Huber, 1967; H. White, 1980).

of one model fit statistic may indicate adequate model fit, while another may indicate that the model has a poor fit to the data (Lei & Wu, 2007). Therefore, when assessing model fit, it is prudent to evaluate several indies of model fit with consideration of their individual strengths and vulnerabilities, before deciding whether to reject or retain a model (Byrne, 2012; Hu & Bentler, 1999; Lei & Wu, 2007). For completeness, I report five model fit statistics for each of the path models presented in this thesis: one model test statistic, two incremental fit indices, and two absolute fit indices.

6.2.2.1 The Model Test Statistic

The chi-square (χ^2) test statistic is referred to as an 'exact fit' test of model fit (Barrett, 2007; Kline, 2011). Put simply, the chi-square test of model fit tests the null hypothesis that there is not a significant difference between the hypothesised model and the model represented by the data, whereby *acceptance* of the null hypothesis signifies adequate or good model fit to the data (Barrett, 2007; Kline, 2011; West et al., 2012). Therefore, a high chi-square value, and thus a statistically significant result at the α level of .05, signals to the researcher that the hypothesised model represents a poor fit to the data (Kline, 2011). Conversely, a chi-square value that is non-significant at the .05 α level is considered to represent a hypothetical model with a good fit to the data (Barrett, 2007; West et al., 2012). Notwithstanding the fact that an α level is an 'arbitrary' threshold (Barrett, 2007; Kline, 2011), one of the benefits of the chi-square test with an α value is that "it places a limit on what can be dismissed as expected random variation and what should be interpreted as evidence against the model" (Kline, 2011, p. 194). Thus, with the chi-square test statistic of model fit, it is quite clear when a hypothesised model is significantly different to the data (Kline, 2011).

It should be noted that the chi-square model test statistic can be used to assess model fit when using a normal theory method, but is vulnerable to non-normality (Kline, 2011; Muthén & Muthén, 1998-2017). Thus, with non-normal data, a chi-square model test statistic with a scaling correction factor for non-normality is more appropriate (Hayduk et al., 2007; Kline, 2011; McIntosh, 2007). When using the MLR estimation method in Mplus (as this research does), a corrected chi-square test statistic "asymptotically equivalent" to the Yuan-Bentler (Yuan & Bentler, 2000) corrected chi-square model test statistic is automatically calculated (Muthén & Muthén, 1998-2017, p. 668).

It should also be noted that the chi-square model test statistic is vulnerable to large sample sizes, whereby models specified using large samples are likely to yield a statistically significant chi-square value (Barrett, 2007; Hox & Bechger, 1998; West et al., 2012). Although, Hayduk and colleagues (2007) contend that this is not true of all models tested with large samples, namely it "is true *of only some misspecified models,* not models in general" (p. 844; emphasis in original). Similarly, authors such as Kline (2011) and McIntosh (2007) caution against ignoring a significant chi-square model test statistic when assessing model fit with a large sample. Nevertheless, it is generally recommended to consult a variety of model fit indices following inspection of the chi-square model test statistic, and to make a theoretically informed decision about whether to retain or reject a model (Hox & Bechger, 1998; McIntosh, 2007; West et al., 2012).

Next, I provide a brief description of the other model fit indices reported in the following chapter. These fit indices are referred to 'approximate' fit indices, and are generally considered less sensitive to sample size than the chi-square model test statistic (Barrett, 2007; Lei & Wu, 2007; West et al., 2012). In further contrast to the chi-square model test statistic, approximate fit indices are "used to quantify the degree of fit along a continuum " (Hu & Bentler, 1999, p. 2). Therefore, approximate fit indices produce only an indication of model fit that must be interpreted by the researcher, rather than a test statistic and a corresponding α level against which a null hypothesis can be tested (Barrett, 2007; Kline, 2011). It follows that Kline (2011) suggests that approximate fit indices should be regarded as "providing *qualitative* or *descriptive* information about model fit" (p. 205, emphasis in original). As such, it is recommended that approximate fit indices are used in conjunction with the chi-square model fit test statistic, but not in place of it (Kline, 2011).

There are a number of categories of approximate fit indices (for an overview see Kline, 2011, p. 195-196), but two of the most common classifications are 'incremental fit indices' and 'absolute fit indices' (Byrne, 2012; Hu & Bentler, 1998, 1999; West et al., 2012). The four approximate fit indices reported in this chapter fall under the categories of incremental fit indices and absolute fit indices. I address the incremental fit indices first.

6.2.2.2 The Incremental Fit Indices

Incremental fit indices are model fit indices that assess how well the model fit of the hypothesised model compares with the model fit of a statistical baseline model (Hu & Bentler, 1999; Kline, 2011; West et al., 2012). Adequate model fit is said to be achieved if the hypothesised model represents an improvement in fit compared to the baseline model (Hu & Bentler, 1999). In SEM software programmes, the statistical baseline model is generated by the programme; West and colleagues (2012) note that the most common baseline model used by SEM software programmes for comparative model fit indices is the baseline model presented by Bentler and Bonnett (1980).

The first incremental fit index reported in this thesis is the comparative fit index (CFI) introduced by Bentler (1990). The CFI is restricted to fall between 0 and 1 (i.e. it is normed), and CFI values close to 1 are considered indicative of adequate model fit (Byrne, 2012). Specifically, a value above .95 is currently taken to correspond with a model that has adequate fit to the data (Hu & Bentler, 1999).[125]

The second incremental fit index reported in this thesis is the Tucker-Lewis Index (TLI; Tucker & Lewis, 1973). Like the CFI, a TLI value above 0.95 is indicative of adequate model fit (Hu & Bentler, 1999). However, the TLI does not produce a standardised figure, namely it is not restricted to fall between 0 and 1 (Hu & Bentler, 1999; West et al., 2012). It should be borne in mind that the TLI prefers more parsimonious models, therefore a complex model with spurious paths is likely to yield a small TLI value indicative of poor model fit (Byrne, 2012; West et al., 2012).

6.2.2.3 The Absolute Fit Indices

Absolute fit indices assess "how well an a priori model reproduces the sample data. Although no reference model is used to assess the amount of incremental mode fit" (Hu & Bentler, 1998, p. 426). Hu and Bentler (1998) further describe the value of an absolute fit index as being "analogous to R^2 by comparing the goodness of fit with a component that is similar to a total sum of squares" (p. 426).

[125] Note that the model fit cut-off values recommended by Hu and Bentler (1999), upon which a decision about whether to accept or reject a model are based, are not absolutes. The paper by Hu and Bentler (1999) reports revised cut-offs, which are stricter than earlier cut-off values.

The first absolute fit index reported in this chapter is the root mean square error of estimation (RMSEA; e.g. Steiger, 1990). The RMSEA can have a value of between 0 and 1; however in contrast to the CFI and TLI, the closer the RMSEA value is to 0, the better the model fit (West et al., 2012). Hu and Bentler (1999) recommend that a model should be considered to have adequate fit to the data when the RMSEA value is less than .06. In addition to the RMSEA figure, a 90% confidence interval is often reported, and is provided in the Mplus output. The confidence interval "demonstrates the degree of uncertainty in the estimate in the RMSEA" (Kenny et al., 2015, p. 489), whereby a smaller confidence interval indicates greater certainty in the RMSEA value. However, it should be borne in mind that the RMSEA is vulnerable to inaccuracy with small samples or in models with few degrees of freedom (Kenny et al., 2015).[126] However, Kenny and colleagues (2015) also note that a large sample and a model with few degrees of freedom is less likely to yield an erroneous RMSEA value than a small sample and a model with few degrees of freedom.

The second absolute fit index reported in this thesis is the standardized root mean square residual (SRMR; Bentler, 1995; cited in West et al., 2012). Like the RMSEA, the SRMR can have a value between 0 and 1, where a value close to 0 indicates good model fit. When assessing the SRMR, Hu and Bentler (1999) recommend a cut-off of .08, where values below .08 signify adequate model fit.

6.3 Assessing Moderation Effects: A Multiple-Group Approach

In this section, I provide a description of the methods used to examine moderation effects presented in Chapter 7. Moderation is commonly defined as "a situation in which *X*'s effect on *Y* varies as a function of some third variable *M*, the moderator variable" (Hayes, 2009, p. 415, emphasis in original). A common analytical technique to test for moderation is to frame the moderation as an interaction of *X* and *M*, and to include a multiplicative interaction term (*XM*) in a regression model to assess the presence of the hypothesised interaction effect (Edwards, 2009; Jose, 2013). In such cases, the variable *M* is posited to have a moderating effect on *X* 's relationship with *Y*. However,

[126] Hence why the RMSEA can also be categorised as a 'parsimony-adjusted index', meaning that it is more favourable to simple models (Kline, 2011).

because the multiplicative interaction term captures the combined influence of *XM* on *Y*, it is equally possible that the interaction term represents the effect of *M* on *Y* as a function of *X* (Arnold, 1982; Edwards, 2009). Therefore, the configuration of the interaction is determined (and must be justified) by the researcher's theoretical perspective about which variable is interpreted to have the moderation effect and which is interpreted as being the predictor (Andersson, Cuervo-Cazurra, & Nielsen, 2014).

An alternative method to test for moderation effects in SEM is multiple-group analysis, where the moderator variable is a categorical variable (Muthén & Muthén, 1998-2017). Thus, a continuous moderator variable must be categorised. For example, within the context of this thesis, IPV morality strength would be categorised into levels, namely strong and weak IPV morality. It follows that where a multiple-group method is used to assess the presence of moderation effects, the sample is grouped based on the categories of the moderator variable. Therefore, in a multiple-group approach the moderating variable is clearly established (although must, of course, still be justified by theory). Next, the presence of moderation effects can be determined by assessing whether the strength of regression paths differ significantly between the groups. Thus, if there is a difference in the strength of the relationship between *X* and *Y* between categories or groups of *M*, it is clear that *M* has a moderating effect.

Of course, it can be argued that categorising a continuous variable into levels is arbitrary, or sacrifices statistical sensitivity (Jose, 2013; Marsh, Wen, Nagengast, & Hau, 2012). Yet, in consideration of the conceptual distinction between a multiple-group moderation method and a moderation method that applies a multiplicative interaction term, using a multiple-group method with a categorised moderator variable may be deemed more suitable under particular circumstances. Such circumstances include when the research question is concerned a) with clearly distinguishing the predictor variable (*X*) from the moderating variable (*M*), and b) with understanding how the different categories of a moderating variable (*M*) influence the strength of the relationship between the predictor variable (*X*) and the outcome variable (*Y*). This thesis is concerned with answering such questions, and accordingly, the multiple-group method was chosen to examine moderation effects in this research.

Next, I delineate the techniques used in this thesis to assess moderation effects with a multiple-group path model. I begin by describing how a multiple-group path model is specified in Mplus.

Then I describe the method used to assess moderated mediation, which is used in this thesis to examine whether the specified indirect paths of the model hold (i.e. are generalisable) across males and females, *and* whether the strength of the specified indirect paths of the model are stronger for the weak IPV morality group than the strong IPV morality group. Finally, I describe the method used to carry out tests of structural invariance, which I applied to examine whether the strength of the relationship from partner conflict to IPV perpetration is stronger for individuals with weak IPV morality than for individuals with strong IPV morality.

6.3.1 Multiple-Group Models

The use of multiple-group analysis allows for the examination of whether the structural paths specified in the path model are invariant (i.e. equivalent) in the groups that comprise the study sample (Byrne, 2012; R. H. Hoyle, 2012). Thus, in multiple-group analysis the specified path model is analysed concurrently for both groups (Byrne, 2012).

The first stage in multiple-group analysis is to establish a baseline model. The process followed for the analyses presented in this thesis was first to specify the same path model for each group under investigation. Then, if necessary and theoretically appropriate, the group-specific models were modified, that is, specification of the model was allowed to vary between groups (see specific analyses in Chapter 7 for description and justification for model modification). Subsequently, the re-specified multiple-group model was run, and model fit was assessed. Where the model showed adequate fit to the data, the model was retained, the coefficients for the paths were interpreted, and the results reported.

The baseline multiple-group model allows for a *preliminary* (i.e. visual) assessment of whether the overall path model holds across groups, and whether there are differences in the strength of particular paths between the groups. However, to establish whether observed patterns hold statistically, further more robust analyses are required.

6.3.2 Moderated Mediation

Moderated mediation analysis allows for the examination of whether specified indirect paths (i.e. mediation paths) vary significantly as a function of a moderator variable (R. M. Baron & Kenny, 1986; Hayes, 2009). For example, moderated mediation is used in this thesis to examine whether there is a statistically significant difference between males and females in the strength of the indirect path from partner cohesion to IPV perpetration.

Within Chapter 7 I present moderated mediation analyses that have been carried out using a multiple-group framework in Mplus. To test for moderated mediation, the indirect effect under investigation is computed *separately for each group* by multiplying the path from the predictor to the mediator (path a) by the path from the mediator to the outcome (path b). The difference between the computed indirect effect for each group is then produced as part of the model output in Mplus to provide a coefficient indicating whether the difference in the size of the indirect effect between the groups is statistically significant.

6.3.3 Structural Invariance

Multiple-group models can also be used to test for moderation effects across specific structural paths by applying tests of structural invariance (Byrne, 2012; Muthén & Muthén, 1998-2017). A structural path (e.g. a regression path) is invariant between groups when the strength of the path is statistically equivalent (i.e. equally or similarly as strong) in each group (Byrne, 2012). Thus, a finding of structural invariance indicates the *absence* of a moderation effect. More specifically, structural invariance signifies that the strength of the path does not differ as a function of the variable represented by the grouping categories (e.g. gender or strength of morality). Conversely, when the strength of a structural path is found to vary significantly between groups, and thus is *not* invariant, it indicates the presence of a moderation effect (Marsh et al., 2012).

To test for structural invariance, the baseline multiple-group model is compared with a nested multiple-group model. In the baseline model, all paths are freely estimated, while in the nested model, the regression path that is being examined for invariance is constrained to be equal across both groups (Byrne, 2012; Marsh et al., 2012). Next, the difference in the chi-square model test statistic for the baseline model and the chi-square model test statistic for the nested model are

compared using a chi-square difference test. If the model fit for the nested (constrained) model is significantly worse than the model fit of the baseline model, it is indicative of structural non-equivalence (Muthén & Muthén, 1998-2017). In such cases this indicates that the strength of the regression path *does* vary between groups, and therefore there is a moderation effect. By contrast, if the nested model is not a significantly worse fit than the baseline model, it signifies structural invariance: the strength of the regression path is equivalent (i.e. similarly strong) across groups and there is not a moderation effect.

To carry out the chi-square difference test for structural invariance when an estimation method for non-normal data has been used, a formula that accounts for the scaled (corrected) chi-square statistic must be applied by hand (Muthén & Muthén, 1998-2017). The formula for the scaled chi-square difference test is presented in Satorra and Bentler (2010), and follows two steps. First, the scaling correction for the difference test is calculated:

$$cd = \frac{(d0 \times c0 - d1 \times c1)}{(d0 - d1)}$$

Where cd is the scaling correction for the difference test, d0 is the degrees of freedom for the nested model, c0 is the scaling correction factor for the nested model, d1 is the degrees of freedom for the baseline model, and c1 is the scaling correction factor for the baseline model.

Next, to calculate the Satorra-Bentler scaled chi-square difference test, the following formula is applied:

$$TRd = \frac{(T0 \times c0 - T1 \times c1)}{cd}$$

Here, TRd is the value of Satorra-Bentler scaled chi-square difference, T0 is the scaled chi-square value for the nested model and T1 is the scaled chi-square value for the baseline model. Again, c0 is the scaling correction factor for the nested model, c1 is the scaling correction factor for the baseline model, and cd is the previously calculated scaling correction for the difference test. Next, taking the result of the Satorra-Bentler scaled chi-square difference test with the difference in the degrees of freedom between the nested and baseline models, a chi-square distribution table can be

consulted to determine whether or not the value of the Satorra-Bentler scaled chi-square difference test is statistically significant (Muthén & Muthén, 1998-2017).

Having described the analytical strategy adopted in this thesis, I now address two methodological limitations that should be borne in mind when interpreting the results of the analyses presented in the following chapter.

6.4 A Note on Methodological and Analytical Limitations

There are two methodological limitations, which translate into analytical limitations, and which require acknowledgement before the presentation and interpretation of the analyses in the remaining chapters of the thesis. The first is that the measures used within this thesis do not capture situational data (as defined by SAT, see Chapter 3). I noted in Chapter 3 that while the theoretical framework adopted within this thesis is SAT, which emphasises the importance of the situational analysis of moral rule-breaking, the data collected and analysed for this thesis is not situational. It was not possible (with the data available) to analyse at the situational level the motivation process leading to a particular conflict (i.e. the experience of becoming motivated), and the causal process from the particular conflict to the perpetration of the particular act of violence against a partner.

However, it *was* possible to use *generalised* measures of the constructs of interest. As stated by Wikström and colleagues (2012), generalised measures capture respondents' "general views" (p. 132), for example, general views of how wrong it is to use violence against a partner, or general tendency to experience anger in response to partner-related frictions. The assumption is that people's responses to these general measures reflect how the construct that has been measured (e.g. IPV morality) is likely to be applied by the individual in a particular context, such as when in conflict with a partner (see further, Wikström et al., 2012).

Accordingly, while within this thesis it is not possible to carry out truly situational analyses, it was possible to analyse, for example, whether people with high partner-specific friction sensitivity were more likely to engage in more conflict with a partner than people with low partner-specific friction sensitivity, and in turn, whether people who were frequently engaged in conflict with a partner were more likely to perpetrate more acts of IPV than people who did not have frequent conflicts with a partner. Likewise, it was possible to examine whether any of these relationships were

stronger for people with weak IPV morality than for people with strong IPV morality. Subsequently, theoretical interpretation of these analyses will be guided by the suppositions of SAT (see Chapter 7 and Chapter 8).

The second limitation concerns causal order. Namely, the behaviours to be explained within this thesis (i.e. the dependent variables of partner conflict and IPV perpetration) occurred in the past (in the previous year), while theoretical constructs, such as the components of IPV morality, were measured at the time of data collection. Much emphasis is often placed on the temporal order of variables in criminological research to establish (or at least posit) causality. In particular, Hardie (2017) observes that "discussions about the importance of causal-ordering and measurement spacing take place within the context of developmental [criminological] research" (p. 258). It follows that longitudinal designs have long been heralded as the most appropriate research design to study the causes of criminal and delinquent behaviour (e.g. Blumstein, Cohen, & Farrington, 1988; Menard & Elliott, 1990). By contrast, cross-sectional designs have been criticised for their inability to establish causal relationships, particularly where data that represents the outcome variable (e.g. crime) is measured retrospectively, and the data representing the explanatory variable (or variables) is measured at the time of data collection (e.g. Saltzman, Paternoster, Waldo, & Chiricos, 1982; Thomas & Bishop, 1984).

The longitudinal design of PADS+ (see Chapter 5) means that in some cases it is possible to examine whether constructs such as personal morality measured at one wave of data collection predict moral rule-breaking (e.g. crime) at a later wave of data collection. However, this was not possible for the analyses presented in this thesis: measures such as IPV-specific moral rules and moral emotions, and partner-specific friction sensitivity were only measured at Wave 8, namely at the same wave that data on partner conflict and IPV perpetration was collected (a Wave 9 has not yet been carried out). Furthermore, due to the lag between the waves of PADS+ data collection (particularly after Wave 5), such a longitudinal design is arguably more appropriate to examine developmental patterns of behaviour than causes of specific actions. As such, a longitudinal design may *not* be more accurate for explaining the causes of actions than a cross-sectional design, even though the time order of the variables is more appropriate in a longitudinal design.

When research is concerned with studying the relationship between behaviour and constructs considered to be relatively stable over time, such as personal morality, the use of a cross-sectional design where the behaviour has been measured retrospectively, and the presumed stable constructs

have been measured at the point of data collection, may not be as problematic as first thought (Hardie, 2017). In addressing this issue, Wikström, and colleagues (2012) compared the strength of the relationship between individual crime propensity (measured as personal moral rules and self-control) and crime frequency measured retrospectively, and individual crime propensity and crime frequency measured at a later date. Wikström, and colleagues (2012) report that "which strategy is adopted makes little difference for the magnitude of the correlation between crime and crime propensity" (p. 129; the same point and reference is made by Hardie, 2017). Therefore, while it is acknowledged that the variables that comprise the theoretical model to be tested in this thesis were not measured in the time order that they are presented in Figure 6.1 at the beginning of this chapter, the violation of temporal order is not considered a significant problem that alters the meaning of the analyses presented in Chapter 7.

6.5 Analytical Strategy: Summary

In this chapter I have detailed the analytical strategy that is adopted in this thesis. I began with an overview of the theoretical model to be tested, and the research questions that have been posited in order to test the theoretical model. I then introduced path analysis as an appropriate and elegant statistical technique for simultaneously testing multiple hypothesised relationships, as is the case within this thesis. In delineating the path analytic technique, I addressed issues concerning the selection of an estimation method with non-normal data and in doing so provided the rationale for the use of the MLR estimation method. I also chronicled the process involved in the assessment of model fit, described the model fit statistics reported in this thesis: the chi-square test statistic, CFI, TLI, RMSEA, and SRMR. Finally, I described the methods used within this thesis to examine the presence of moderation effects. I concluded with an acknowledgement of two methodological limitations that should be borne in mind when appraising the results of the analyses in Chapter 7, namely the level of analysis and the temporal order of the variables.

PART 4: Analyses and Results

7: Analyses and Results

In this chapter I present the results of the analyses carried out to answer the research questions posed at the beginning of Chapter 6. Following preliminary correlation analyses, I begin by specifying a path model to test the hypothesis that high partner-specific friction sensitivity and low partner cohesion translate into increased levels (frequency) of intimate partner violence (IPV) perpetration by influencing the level (frequency) of partner conflict. Results of the path model provide support for the hypothesis. Building upon the first path model, I use a multiple-group method to carry out gender analyses to examine whether the indirect paths from partner-specific friction sensitivity and partner cohesion to IPV perpetration frequency hold across males and females. The findings of the gender analyses point to the generalisability of the model to both males and females.

Next, I examine the role of IPV morality. Again, following preliminary analyses of basic relationships between the variables of interest, I specify multiple-group path models to carry out a series of analyses. First, I examine the global influence of IPV morality, namely whether the strength of IPV morality has a moderating effect on the strength of the indirect effects established in the earlier models. Next, I examine the more specific role of morality between the experience of conflict (motivation) and the perpetration of IPV (moral rule-breaking). Results of the morality analyses provide evidence in support of situational action theory's (SAT's) argument that personal morality (i.e. IPV morality) is the key (individual-level) explanatory variable relevant to understanding why a person perpetrates acts of moral rule-breaking, such as IPV. In doing so, these findings also point to the generalisability of SAT to the explanation of IPV as moral rule-breaking. Finally, I examine whether the important role of morality identified in these models holds across males and females. Again, results provide evidence for the generalisability of IPV morality as a key explanatory variable in both male and female perpetrated IPV. Results also suggest that the 'gender gap' in IPV perpetration in the female direction (see Chapter 5) may be rooted in more females than males having weak IPV morality.

7.1 The Relationship Between Friction Sensitivity, Partner Cohesion, Partner Conflict, and The Perpetration of Partner Violence

The analyses within this first section test the core of the path model that forms the foundation of the subsequent analyses presented in this chapter, and examines whether high partner-specific friction sensitivity and low partner cohesion translate into high frequency of IPV perpetration by influencing the level (frequency) of partner conflict. In establishing the core path model that forms the basis of the analyses presented in this chapter, this first section allows for a test of SAT's argument that factors that contribute to a person becoming motivated (i.e. becoming engaged in conflict) such as high partner-specific friction sensitivity and low partner cohesion are not sufficient to explain IPV actions in and of themselves. Rather, I draw upon the assumptions of SAT to hypothesise that high partner-specific friction sensitivity and low partner cohesion translate into increased IPV frequency *by influencing the level of partner conflict*. It follows that the purpose of this first section is to test this hypothesis before examining the role of IPV morality in the explanation of partner violence perpetration in Section 7.2.

7.1.1 The Relationship Between Friction Sensitivity, Partner Cohesion, Partner Conflict, and IPV Perpetration: Preliminary Analysis

I begin with a preliminary analysis of the basic relationships between the key variables of partner-specific friction sensitivity, partner cohesion, partner conflict and IPV perpetration. Due to the skewed nature of the variables (see Chapter 5), preliminary correlation analyses of the interrelationships between the variables included in this first section were carried out using the non-parametric Spearman's correlation coefficient (see Table 7.1).

Table 7.1. *Spearman's Correlations of Key Variables*

Variables	**1**	**2**	**3**	**4**
1. IPV perpetration frequency	-			
2. Partner conflict frequency	.41***	-		
3. Partner cohesion	-.27***	-.40***	-	-
4. Partner-specific friction sensitivity	.11**	.23***	-.13***	-

Note: ** $p \leq .01$; *** $p \leq .001$ (one-tailed)

All correlations are significant, although they vary in strength. As expected, frequency of IPV perpetration is most strongly (and positively) correlated with frequency of partner conflict. Within this thesis, partner conflict is considered an instigator for partner violence, and thus represents a more proximately relevant influence than partner cohesion or partner-specific friction sensitivity (each of which are postulated to influence the level of partner conflict; see the mediation analyses in Section 7.1.2). Accordingly, partner cohesion and partner-specific friction sensitivity are significantly, but weakly correlated with IPV frequency. However, low partner cohesion is more strongly associated with IPV frequency than high partner-specific friction sensitivity is.

Similarly, the correlation between low partner cohesion and partner conflict is stronger than the correlation between partner-specific friction sensitivity and partner conflict. The inclusion of partner cohesion and partner-specific friction sensitivity in this thesis signifies the first time that these measures have been analysed in relation to partner violence within the context of research guided by the theoretical framework of SAT. However, as noted, previous partner violence research has found that high levels of state and trait anger, and factors that correspond with low partner cohesion (e.g. low relationship satisfaction and high levels of jealousy) are associated with partner violence (for a review see Langhinrichsen-Rohling et al., 2012). Therefore, while it was expected that both partner-specific friction sensitivity and partner cohesion would be correlated with partner conflict and IPV perpetration, no specific hypotheses about which variable would be most strongly related to conflict and violence were made. Finally, high partner-specific friction sensitivity and low partner cohesion are significantly but weakly correlated with each other. This finding was more unexpected: it was anticipated that high partner-specific friction sensitivity and low partner cohesion would be more strongly correlated.

7.1.2 The Relationship Between Friction Sensitivity, Partner Cohesion, Partner Conflict, and IPV Perpetration: Path Analysis with Indirect Effects

To test the hypothesis that high partner-specific friction sensitivity and low partner cohesion translate into increased levels (frequency) of IPV perpetration by influencing the level (frequency) of partner conflict, a path model with mediated effects was specified. Regression paths from partner-specific friction sensitivity and partner cohesion to partner conflict, and from partner conflict to IPV perpetration were defined. Thus, partner conflict was entered into the model as a mediating variable by which poor partner cohesion and high partner-specific friction sensitivity were posited to translate into IPV perpetration frequency. A correlation between partner-specific friction sensitivity and partner cohesion was also specified. Initially, the model included direct effects, represented by regression paths from partner-specific friction sensitivity and partner cohesion to IPV perpetration. However, this resulted in a saturated model (a model with zero degrees of freedom), which precluded interpretation of the model fit.

In order to generate a model with sufficient degrees of freedom, the model was inspected for paths that were not statistically significant, and which if removed, would not comprise the theoretical basis of the model. Review of the coefficients of the saturated model showed that the direct paths were not statistically significant. The core of the model tested within this thesis concerns the indirect paths, while the direct paths (and the correlation between the two predictor variables) were postulated to be less proximally relevant. Therefore, for the model reported in this section, it was decided that removing the direct paths would not compromise the theoretical foundation of the model. The re-specified and more parsimonious model was then re-run, which resulted in a model with good model fit: χ^2 (2) = 5.297, p = .0708, RMSEA = .055 (90% confidence interval: .000, .115), CFI = .968, TLI = .920, SRMR = .029, and is illustrated in Figure 7.1.[127]

[127] As is customary in SEM, the measured variables are represented by boxes, regression paths by single headed arrows (the direction of the arrow corresponds with the direction of the hypothesised relationship between variables), and correlations are represented by double-headed arrows (Hox & Bechger, 1998)

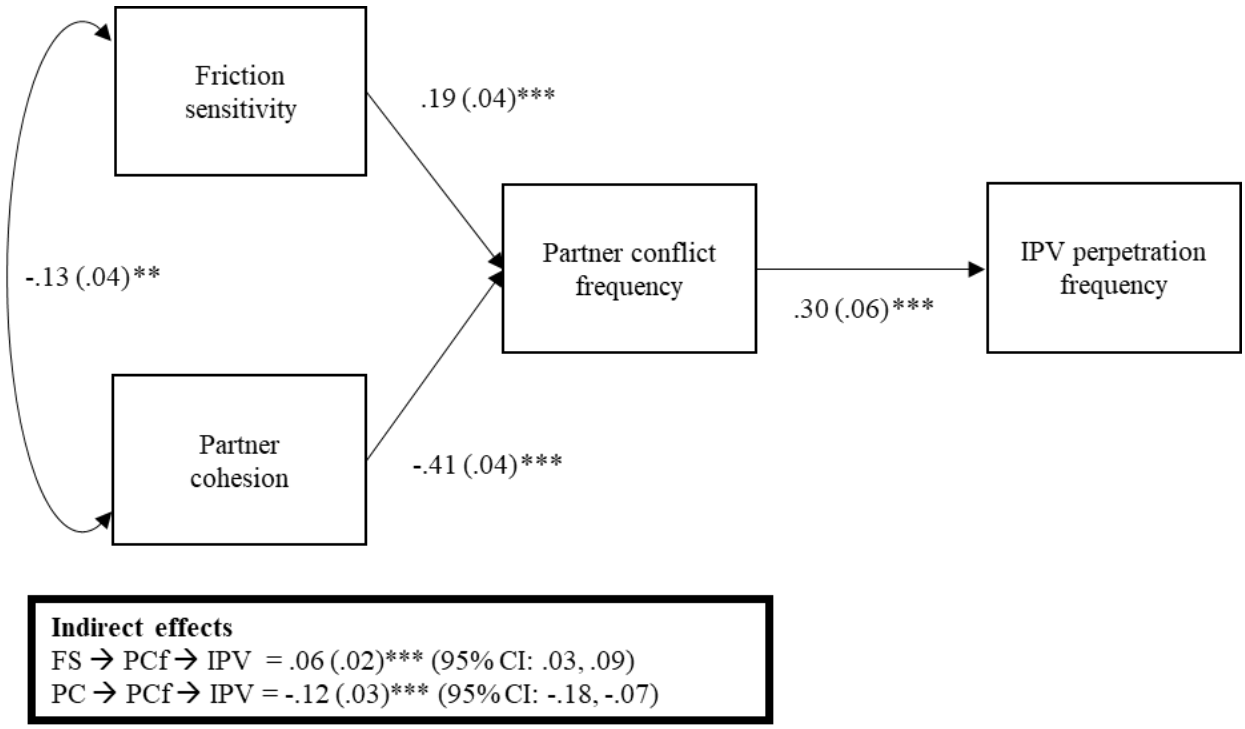

Figure 7.1. Path model with indirect effects.

** $p \leq .01$; *** $p \leq .001$
Note. STDYX results reported.[128] Estimator = MLR. Standard Errors in parentheses.
PC = partner cohesion; FS = friction sensitivity; PCf = partner conflict.

The results of the mediation path analysis show that both high partner-specific friction sensitivity and low partner cohesion significantly predict increased levels of partner conflict, and in turn, high levels of partner conflict predict increased levels of IPV perpetration. Partner cohesion is a stronger predictor of partner conflict than partner-specific friction sensitivity, which follows the pattern indicated by the initial correlation analyses. Likewise, the correlation between partner cohesion and partner-specific friction sensitivity was replicated in the path model.

Finally, neither of the direct paths are retained in the final model, which is in line with SAT's argument that factors that contribute to a person becoming motivated (i.e. becoming engaged in conflict) are not directly causally relevant (Wikström et al., 2012); namely they do not directly

[128] STDYX refers to standardised parameter estimates and their corresponding standard errors, and is the standardisation used for linear regression in Mplus (Muthén & Muthén, 1998-2017). Throughout this chapter, unless stated otherwise, the coefficients reported in the path models are standardised (STDYX) coefficients to aid interpretation of the different effects of the independent variables on the dependent variables.

explain moral rule-breaking such as IPV. However, both indirect effects *are* significant; in particular, the indirect path between partner cohesion and IPV perpetration appears stronger than the indirect effect between partner-specific friction sensitivity and IPV perpetration. The difference in the size of the indirect effects reflects the observation that low partner cohesion more strongly translates into partner conflict than high partner-specific friction sensitivity does. Notwithstanding the slight difference in the size of the indirect effects, the statistical significance of both lends support to the hypothesis that high partner-specific friction sensitivity and low partner cohesion both translate into increased levels of IPV perpetration by influencing the level of partner conflict.

7.1.3 The Relationship Between Friction Sensitivity, Partner Cohesion, Partner Conflict, and IPV Perpetration: Gender Analysis

As noted in earlier chapters, the issue of whether theories of crime generally, or theories of IPV more specifically, are applicable to males and females is an issue of contention. However, SAT submits that the explanation for why a person perpetrates an act of moral rule-breaking (i.e. an act of IPV) should hold across genders (Hirtenlehner & Treiber, 2017). Thus, even where there are differences between males and females in the prevalence and frequency of moral rule-breaking, for those individuals who engage in moral rule-breaking, the explanatory process should be replicated in males *and* females (Hirtenlehner & Treiber, 2017). It follows that within this sub-section I examine whether the mediation path model specified for the whole sample, in which both high partner-specific friction sensitivity and low partner cohesion translate into increased IPV perpetration by influencing the level of partner conflict, holds across males and females.

As described in Chapter 5, the sample of this study is comprised of 297 females and 244 males. Comparison of prevalence of IPV perpetration shows that 54 (18%) females had a prevalence of perpetrating at least one act of partner violence in the past year, while 27 males (11%) reported a prevalence of IPV perpetration in the last year. Thus, the males in the sample have a lower prevalence of IPV perpetration than the females in the sample. A chi-square test of independence shows a statistically significant association between sex and IPV prevalence, χ^2 (1), = 5.328, p = .021. This result indicates that females were significantly more likely to perpetrate at least one act

of violence against a partner in the last year than males were. Moreover, a Mann-Whitney-U test[129] indicates that, on average, females perpetrated acts of IPV significantly more often (*Mean Rank* = 279.51) than males did (*Mean Rank* = 260.65), U = 33707.50, p = .012 (one-tailed), z-score = 2.250. However, the effect was small, r = .10.

To examine whether the mediation path model that was established for the whole sample holds across males and females, I specified a two-group multiple-group model based on gender. A path model that included both direct and indirect effects was defined for the male group and the female group, whereby the estimated regression and correlation coefficients were freely estimated (i.e. they could be group-specific). The initial model was saturated; therefore, following the procedure of model refinement described previously, the non-significant direct paths were removed and the re-specified model re-run. The final multiple-group model with standardised results is depicted in Figure 7.2.

[129] Due to the skewed nature of the IPV perpetration frequency variables, I have chosen to use the non-parametric Mann-Whitney-U test in place of the parametric independent samples *t*-test

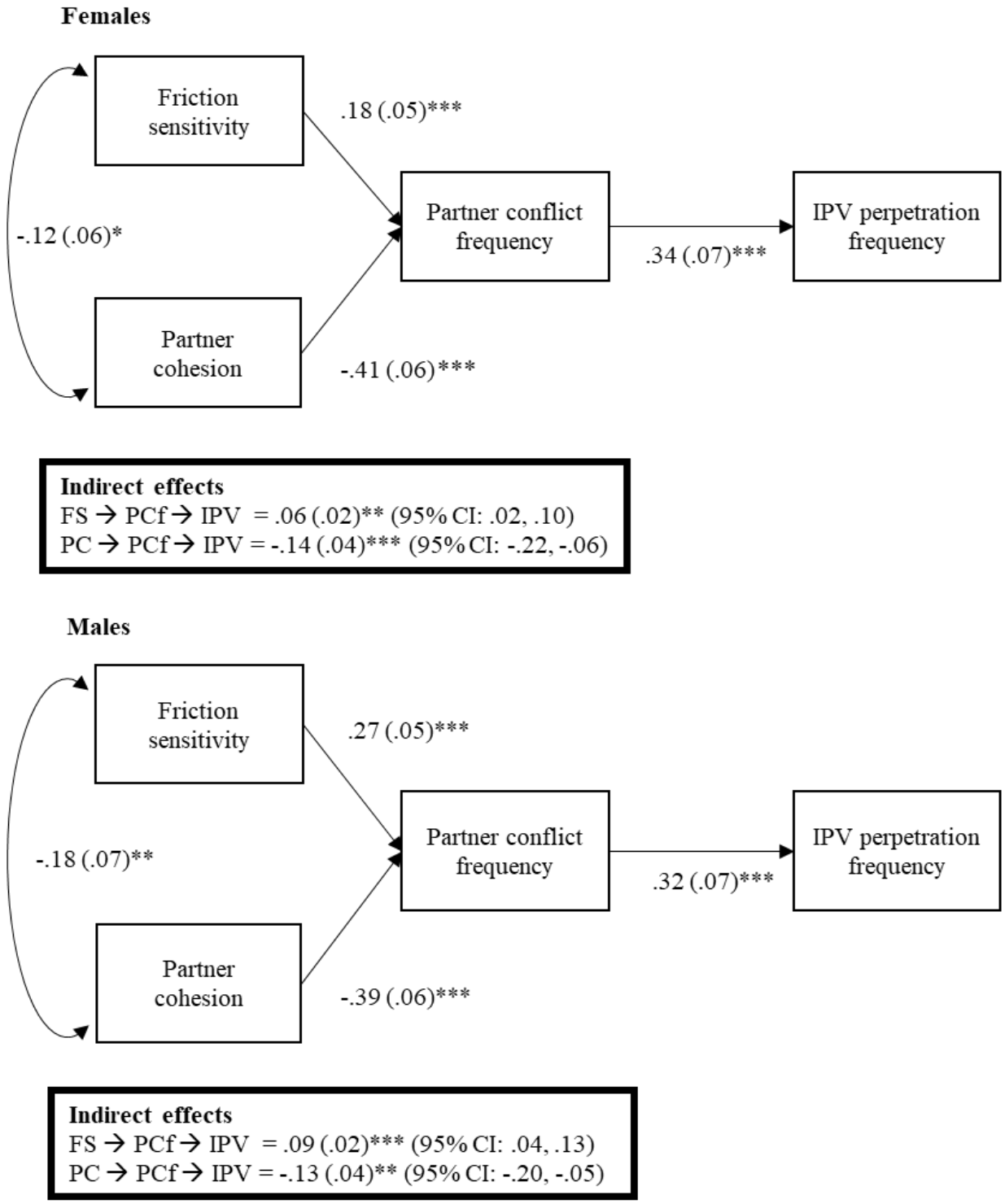

Figure 7.2. Male and female multiple-group path model with indirect effects

** $p \leq .01$; *** $p \leq .001$.
Note. STDYX results reported. Estimator = MLR. Standard Errors in parentheses. PC = partner cohesion; FS = friction sensitivity; PCf = partner conflict.

The model fit was very good: χ^2 (4) = 5.969, *p* = .2015, RMSEA = .043 (90 % confidence interval: .000 - .0109), CFI = .986, TLI = 0.964, SRMR = .027. From visual comparison of the male and female groups, the pattern of relationships is similar across genders, and reflects the pattern of the mediation path model reported in the previous section in which a single group model was specified for the whole sample. For both male and female groups, high partner-specific friction sensitivity and low partner cohesion predict increased partner conflict, and increased partner conflict predicts higher frequency of IPV perpetration. Low partner cohesion appears to be a stronger predictor of partner conflict than high partner-specific friction sensitivity for both the male and female groups. Finally, both indirect effects for the male and female groups are significant: both high partner-specific friction sensitivity and low partner cohesion translate into increased IPV perpetration by influencing the level of partner conflict. The indirect effect between partner cohesion and IPV perpetration appears larger than the indirect effect between partner-specific friction sensitivity and IPV perpetration for both the male and female groups.

The gender-based multiple-group mediation path analysis suggests that the mediation path model specified for the sample as a whole in Section 7.1.2 is generalisable to males and females. However, to assess whether the indirect effects are *significantly* stronger or weaker for males and females, a moderated mediation analysis was performed. A moderated mediation analysis was carried out for each indirect effect, and in each case, the procedure was the same.

To perform a moderated mediation analysis the indirect effect for males and females was computed separately by multiplying the path from the predictor to the mediator (path a) by the path from the mediator to the outcome (path b). The difference between the computed indirect effect for the male group and the female group was then produced as part of the model output to provide a coefficient indicating whether the difference in the size of the indirect effect between males and females is statistically significant.

The findings of the moderated mediation analysis show that the strength of the indirect path from partner-specific friction sensitivity to IPV perpetration is not significantly different between males and females, *B* = -0.040 (SE = .040), *p* = .257 (two-tailed).[130] Similarly, the indirect effect between partner cohesion and IPV perpetration is not significantly stronger for males or females, 0.22 (SE = .12), *p* = .074 (two-tailed). Thus, the results of the moderated mediation analyses for each indirect

[130] The results for the moderated mediation produced by Mplus are not standardised.

effect indicate that neither of the indirect effects of the path model differ significantly between males and females, which provides further evidence of the generalisability of the model across genders. Thus, while females reported a higher prevalence and frequency of IPV perpetration than males, the root of this difference does not appear to be a difference in the strength of the indirect paths from partner-specific friction sensitivity and partner cohesion to IPV frequency via partner conflict.

7.1.4 The Relationship Between Friction Sensitivity, Partner Cohesion, Partner Conflict, and IPV Perpetration: Section Summary

The findings of the analyses reported in this first section show that both high partner-specific friction sensitivity and low partner cohesion translate into increased levels of IPV perpetration by influencing the level of partner conflict. The path between partner cohesion and partner conflict yields a larger regression coefficient than the path between partner-specific friction sensitivity and partner conflict. Furthermore, the pattern found in the full-sample analysis was replicated in the multiple-group analysis in which group models for each gender were specified. Further support for the generalisability of the mediation model was found in the moderated mediation analyses, which showed that the indirect effects were not significantly different for males or females.

7.2 The Influence of Personal Morality

According to SAT, morality plays an important role in the perception-choice process, which represents the causal mechanism central to SAT's explanation for why and how acts of moral rule-breaking occur (Wikström, 2010a). More specifically, the perception-choice process explains why some motivated individuals will perceive and choose moral rule-breaking as a response to instigating factors, while others will not (Wikström, 2006). While both morality and self-control contribute to the perception-choice process, personal morality is considered more pivotal to understanding why people break or follow moral rules than self-control (Wikström & Treiber, 2007). According to SAT, personal morality is the key (individual-level) explanatory variable in understanding why a person may perceive moral rule-breaking as an action alternative, or not. Within the SAT framework, it is only if a person perceives moral rule-breaking as an action

alternative that moral rule-breaking will occur. It follows that this thesis has concentrated on personal morality, and a key assumption of this research is that personal morality (specifically, moral rules and moral emotions pertaining to IPV) is fundamental to the explanation of why individuals perpetrate acts of IPV.

The role of personal morality in the explanation of moral rule-breaking is most potent and relevant *following* motivation, namely personal morality is posited to influence whether a person sees rule-breaking as an action alternative in response to motivation (e.g. Wikström, 2006). Accordingly, the preponderance of SAT research has concentrated on the explanatory process following motivation. However, a person's 'moral perception' can also be said to influence how a person perceives and processes external stimuli (such as potential frictions), which contribute to a person becoming motivated, thus, "Moral perception helps create motivation" (Wikström, 2006, p. 96). Therefore, within this section, I examine both the more global influence of morality across the motivation and perception-choice processes represented in the path model, and the more specific role of morality between the experience of motivation and the perpetration of moral rule-breaking action.

As described previously (Section 6.1 of Chapter 6), within this thesis, the process leading to motivation is represented by the paths from partner cohesion and partner-specific friction sensitivity to partner conflict, while partner conflict represents the outcome of the motivation process. It follows that partner conflict signifies the instigation of the perception-choice process, and the path between partner conflict and IPV perpetration frequency represents where the perception-choice process (the causal mechanisms in SAT) exerts its influence. To examine the influence of IPV morality both across the paths representing the motivation and causal processes of SAT, and the more crucial influence of morality between partner conflict and IPV perpetration, two stages of analysis are performed.

First, I examine whether the indirect paths from partner-specific friction sensitivity and partner cohesion to IPV perpetration are significant for both individuals with weak IPV morality and individuals with strong IPV morality, and whether there are differences in the strength of the indirect effects between the morality groups. Therefore, this first stage of the analysis examines whether the core path model tested in Section 7.1 of this chapter is replicated across morality groups, but also whether the strength of IPV morality broadly influences the strength of the indirect paths tested in the model. The second stage of analysis examines whether the path from partner

conflict to IPV frequency is stronger for individuals with strong or weak IPV morality. More specifically, are individuals with strong IPV morality less likely to perpetrate acts of IPV even when frequently engaged in conflict with a partner, compared to individuals with weak IPV morality? Therefore, the second part of the analysis addresses the more specific role of IPV morality between the experience of conflict (motivation) and the perpetration of IPV (moral rule-breaking). The analyses are first carried out without accounting for gender, followed by analyses that examine the generalisability of the model across males and females.

7.2.1 Morality: Preliminary Analysis

To answer the questions addressed in this section, participants were first categorised as having strong or weak IPV morality based on their composite IPV morality scores (see Chapter 5 for how the composite score was created from IPV-specific moral rules scores and IPV-specific moral emotions scores).[131] As described in Chapter 5, the composite IPV morality scores were positively skewed. When data violates the assumptions of normality, it is more appropriate to use the median rather than the mean as a measure of central tendency (Field, 2005). Therefore, the median was used to divide the sample into two groups, those who scored below the median were categorised as having strong IPV morality (n = 269), and those with scores above the median as having weak IPV morality (n = 272). Of the individuals with weak IPV morality, 23.8% (n = 62) had perpetrated at least one act of IPV in the past year compared to only 7.1% (n = 19) of individuals with strong IPV morality. A chi-square test of independence shows that there is a statistically significant association between strength of IPV morality and IPV prevalence, χ^2 (1), = 26.29, $p < .001$. Thus, weak IPV morality is significantly associated with a prevalence of IPV perpetration. Further, a Mann-Whitney U test indicates that overall, individuals with weak IPV morality reported perpetrating significantly more acts of IPV (*Mean Rank* = 292.76) in the last year than individuals with strong IPV morality (*Mean Rank* = 249.00), U = 30666.50, $p < .001$ (one-tailed), z-score = -5.246. The effect was small to medium in size, r = .23.

[131] Recall that within this thesis I concentrate on IPV-specific morality (moral rules and moral emotions pertaining specifically to intimate partner violence), rather than a more generalised measure of morality.

Table 7.2. *Spearman's Correlations for The Strong Morality Group*

Variables	**1**	**2**	**3**	**4**
1. IPV perpetration frequency	-	-	-	-
2. Partner conflict frequency	.34***	-	-	-
3. Partner cohesion	-.24***	-.37***	-	-
4. Partner-specific friction sensitivity	.15*	.22***	-.17**	-

* $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$ (one-tailed).

Table 7.3. *Spearman's Correlation's for The Weak Morality Group*

Variables	**1**	**2**	**3**	**4**
1. IPV perpetration frequency	-	-	-	-
2. Partner conflict frequency	.43***	-	-	-
3. Partner cohesion	-.25***	-.39***	-	-
4. Partner-specific friction sensitivity	-.01 *ns*	.17**	.01 *ns*	-

** $p \leq .01$; *** $p \leq .001$ (one-tailed).

Tables 7.2 and 7.3 show that for both strong and weak IPV morality individuals, there is a moderate positive correlation between partner conflict and IPV perpetration, although as expected, the correlation coefficient for weak IPV morality individuals is larger than for strong IPV morality individuals. The correlations between partner cohesion and IPV perpetration are similar across IPV morality groups: both indicate a small to medium inverse relationship. Similarly, the correlations between partner cohesion and partner conflict are of similar size for weak and strong IPV morality individuals: both are indicative of a moderate inverse correlation. As noted previously, within this thesis partner cohesion is postulated to be more proximately related to partner conflict than to partner violence perpetration, and the pattern of correlation coefficients reflects this assumption in both weak and strong IPV morality groups.

Finally, the correlation between partner-specific friction sensitivity and partner conflict is weak to moderate for both weak and strong IPV morality individuals. However, the pattern of correlations between partner-specific friction sensitivity and IPV perpetration, and partner-specific friction sensitivity and partner cohesion differs for weak and strong IPV morality groups. For individuals in the strong IPV morality group, the pattern of correlations mirrors that for the whole sample, as shown in Table 7.1 in the previous section. There is a weak positive correlation between partner-specific friction sensitivity and IPV perpetration, and a weak negative correlation between partner-specific friction sensitivity and partner cohesion. By contrast, the correlations for these variables in the weak IPV morality group are not statistically significant.

7.2.2 Morality: Multiple-Group Analysis

To assess whether there are differences in the strength of the indirect effects specified in the path model between strong and weak IPV morality individuals, and whether the path between partner conflict and IPV perpetration is significantly stronger for participants with weak IPV morality than those with strong IPV morality, a multiple-group method with tests of moderated mediation and structural invariance was employed. I began by specifying a two-group multiple-group path model based on IPV morality groups, which included direct and indirect effects, and where all coefficients were freely estimated for each group. The initial baseline model was saturated and where paths were not significant, they were removed to create a more parsimonious model. The final morality multiple-group model had good model fit: χ^2 (2) = .2.488, p = .2883, RMSEA = .030 (90 % confidence interval: .000, .128), CFI = .995, TLI = .977, SRMR = .019, and is shown in Figure 7.3.

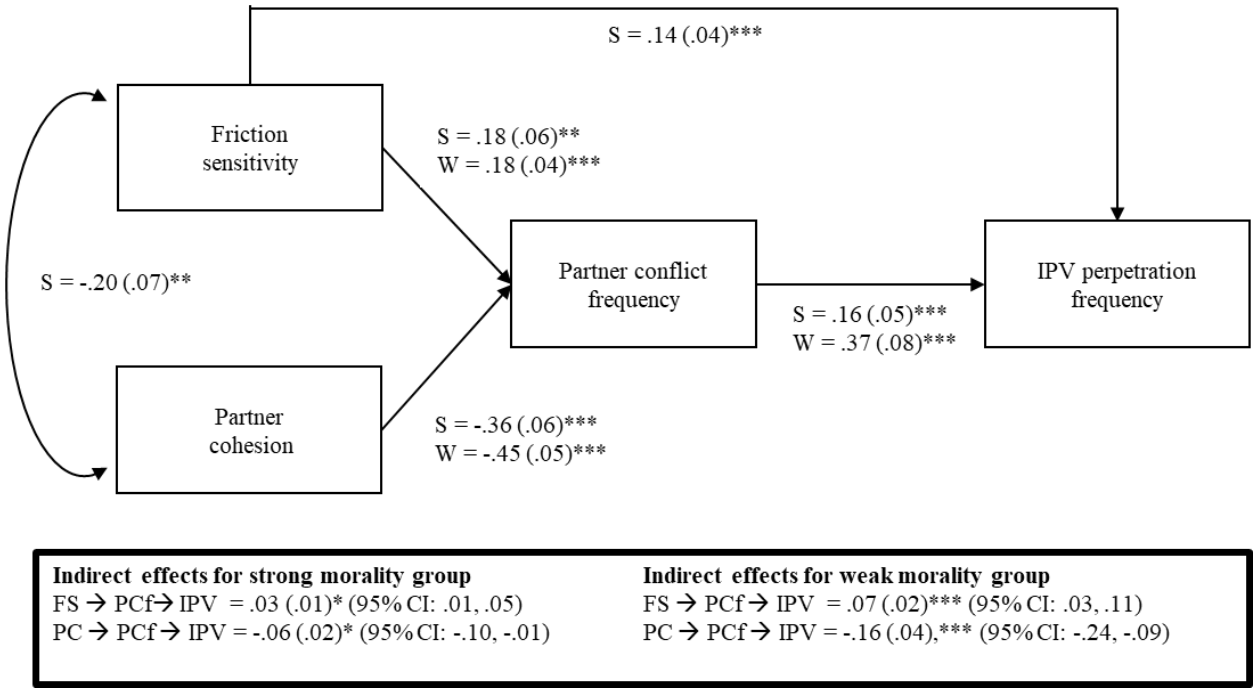

Figure 7.3. Morality multiple-group path model with indirect effects.

* $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$.
Note. STDYX results reported. Estimator = MLR. Standard Errors in parentheses. S = strong morality group; W = weak morality group; PC = partner cohesion; FS = friction sensitivity; PCf = partner conflict.

First, there are some differences between the morality multiple-group baseline model and the previous models presented in Section 7.1. Following inspection of the saturated baseline model and the subsequent removal of non-significant paths, the correlation between partner cohesion and partner-specific friction sensitivity, and the direct path between partner-specific friction sensitivity and IPV perpetration are only retained for the strong IPV morality group. This reflects the pattern of correlations reported in Tables 7.2 and 7.3. At first glance, it seems curious that partner-specific friction sensitivity should be a significant predictor of IPV perpetration in individuals with strong IPV morality but not in those with weak IPV morality. However, it indicates that for the few individuals with strong IPV morality who have reported perpetrating at least one act of IPV in the last year, a tendency to experience high levels of anger in response to a partner's behaviour serves to override their personal moral rules against partner violence. Recall that Wikström and Treiber (2009) define reactive aggression as automatic aggression that occurs when emotion (such as anger) overrides the perception of action alternatives. Therefore, the violent individuals with strong IPV morality but high partner-specific friction sensitivity (i.e. they have a tendency to experience

high levels of anger in response to partner frictions) in this sample, may be susceptible to reactive violence that overrides and thus violates their own personal standards of conduct.

Turning to the remaining paths of the model, which form the paths of the indirect effects, all are statistically significant for both strong and weak IPV morality groups. Furthermore, consistent with the path models presented in Section 7.1, both indirect paths are significant across IPV morality groups, which shows that the core of the model tested in this thesis is replicated across the analyses presented so far. However, both indirect effects appear to be larger for the weak IPV morality group than the strong IPV morality group. To establish whether the observed difference is statistically significant, a test of moderated mediation was carried out, whereby I computed the difference in each indirect effect between strong and weak IPV morality groups. The test of moderated mediation performed on the indirect path from partner-specific friction sensitivity to IPV perpetration showed that the indirect effect for the weak IPV morality group is significantly stronger than the indirect effect for the strong IPV morality group, B = -.08 (SE = .03), p = .012. Likewise, the indirect effect between partner cohesion and IPV perpetration is significantly stronger for the weak IPV morality groups than the strong IPV morality group, B = .34 (SE = .12), p = .004. Therefore, both high partner-specific friction sensitivity and low partner cohesion translate into IPV perpetration by influencing the level of partner conflict, but *more strongly* for weak IPV morality individuals than strong IPV morality individuals. Accordingly, IPV morality appears to influence the process leading to motivation (conflict) *and* the process from motivation to action (IPV).

However, drawing upon the core suppositions of SAT, the path between partner conflict and IPV frequency is where a difference between weak and strong IPV morality individuals is posited to be particularly pertinent. This path represents where the perception-choice process (the causal mechanism) in SAT is activated, and where personal IPV morality guides a person's perception towards or away from violence against a partner as an action alternative. Initial inspection of the regression coefficients indicates the presence of a moderation effect: the path from partner conflict to IPV perpetration appears to be stronger for individuals with weak IPV morality than for individuals with strong IPV morality, which would be in line with the assumptions of SAT. Nevertheless, visual inspection of the different coefficients is not sufficient to determine whether the observed difference is statistically significant. To establish if indeed IPV morality significantly moderates the relationship between partner conflict and frequency of IPV perpetration, I performed a test of structural invariance on this regression path.

To test for structural invariance, the difference between the chi-square of the baseline model and the chi-square of a nested model was calculated. In the baseline model, all paths were freely estimated, while in the nested model, the regression path between partner conflict and IPV frequency for both morality groups was constrained to be equal. Then, the degrees of freedom, the chi-square value, and the scaling correction factor from the baseline and nested models were used to calculate the Satorra-Bentler scaled chi-squared difference test (Satorra & Bentler, 2010; see Chapter 6). The figures for the baseline and nested models are presented in Table 7.4, along with the chi-square difference figure and the significance level.

Table 7.4. *Morality Multiple-Group Chi-Square Difference*

Baseline model			**Nested model**			**Absolute difference**	
df	χ^2	**SCF**	**Df**	χ^2	**SCF**	Δ**df**	$\Delta\chi^2$
4	2.879	1.3494	5	20.415	1.6336	1	10.64**

** $p \leq .01$
Note. SCF = Scaling correction factor.

As Table 7.4 shows, the model fit for the nested model is significantly worse than the baseline model (i.e. the paths are not invariant across groups). This indicates that the path from partner conflict to IPV perpetration frequency *is* significantly stronger for weak IPV morality individuals than for individuals with strong IPV morality. Put another way, this result shows that the level of personal IPV morality significantly moderates the path between partner conflict and IPV perpetration. Figure 7.4 on the following page provides a clear representation of this moderation effect for both mean and median IPV frequency.[132]

Inspection of Figure 7.4 shows that while increased levels of partner conflict predict a higher frequency of IPV perpetration in both strong and weak IPV morality groups, weak IPV morality individuals are significantly more likely to engage in more acts of IPV than strong IPV morality individuals. Thus, these findings lend support to SAT's assertion that morality has a significant

[132] Due to the skewed distribution of IPV frequency, and because the mean can be affected by outliers, I have chosen to present both the mean and median to illustrate the moderation effects throughout this chapter.

influence over how people respond to motivation: people with strong IPV morality think it is wrong to be violent towards a partner, and therefore are less likely see violence as an action alternative when engaged in conflict, and therefore are less likely to perpetrate IPV.

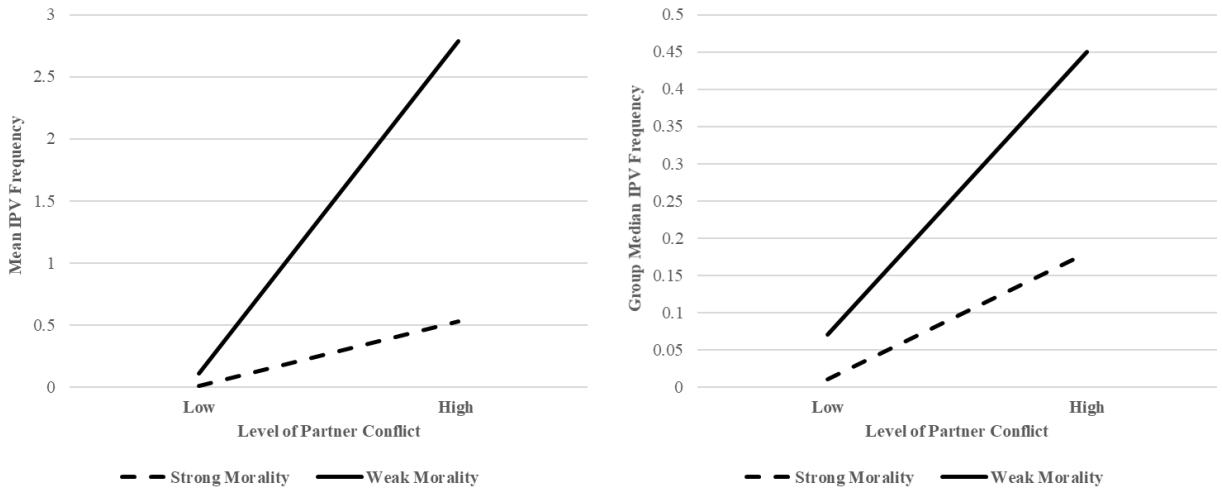

Figure 7.4. Depiction of the moderation effect of IPV morality on the path between partner conflict and IPV perpetration.

Note. Both partner conflict and morality have been dichotomised at the median.

7.2.3 Morality: Gender Analysis

In the gender analysis presented in Section 7.1.3, it was shown that the path model with indirect effects was replicated in both males and females. In the gender analysis of the present section, I examine whether the moderating influence of morality, both across the indirect effect, and more specifically, between conflict and IPV perpetration, holds for males and females. I will also examine whether differences in the proportion of males and females who have weak or strong IPV morality may underlie the 'gender gap' in IPV perpetration (namely that females in this sample, on average, self-reported significantly more acts of IPV than males). According to SAT, the influence of morality should be equivalent across genders, namely, both males and females with weak IPV morality should be more likely to perpetrate acts of violence than strong IPV morality males and females. People perpetrate acts of IPV (in part) because their personal IPV morality allows them

to perceive such violence as an action alternative, not because they are male or female.[133] However, the observed gender gap in IPV perpetration in the female direction should be reflected in a higher proportion of females having weak IPV morality than males.

Before I examine whether there are gender-based differences in the influence of IPV morality on the relationship between partner-specific friction sensitivity, partner cohesion, partner conflict, and IPV perpetration, I begin with a preliminary analysis of the difference in IPV morality between males and females. First, 32% of males (n = 77) have weak IPV morality, compared with 66% (n = 195) of females, and a chi-square test of independence shows that there is a statistically significant association between whether individuals are categorised as having strong or weak IPV morality and gender, χ^2 62.303 (1), $p < .001$. Namely, females are significantly more likely to have weak IPV morality than males, and males are significantly more likely to have strong IPV morality than females. Thus, this preliminary analysis of gender differences in IPV morality points to the root of the gender gap in IPV perpetration being in the higher proportion of females than males with weak IPV morality.

Next, to examine whether there are gender-based differences in the influence of IPV morality on the relationship between partner-specific friction sensitivity, partner cohesion, partner conflict, and IPV perpetration, I carried out a multiple-group analysis whereby groups were defined by both sex and IPV morality categories. Therefore, the multiple-group analysis was comprised of four groups: males with strong IPV morality (n = 167), males with weak IPV morality (n = 77), females with strong IPV morality (n =102), and females with weak IPV morality (n = 195).

[133] Of course, SAT's framework of moral rule-breaking includes far more than personal morality, as I have discussed at length in Chapters 2, 3 and 4. Therefore, the reader should bear in mind that this research presents a partial test of SAT in which the key explanatory variable is personal IPV morality.

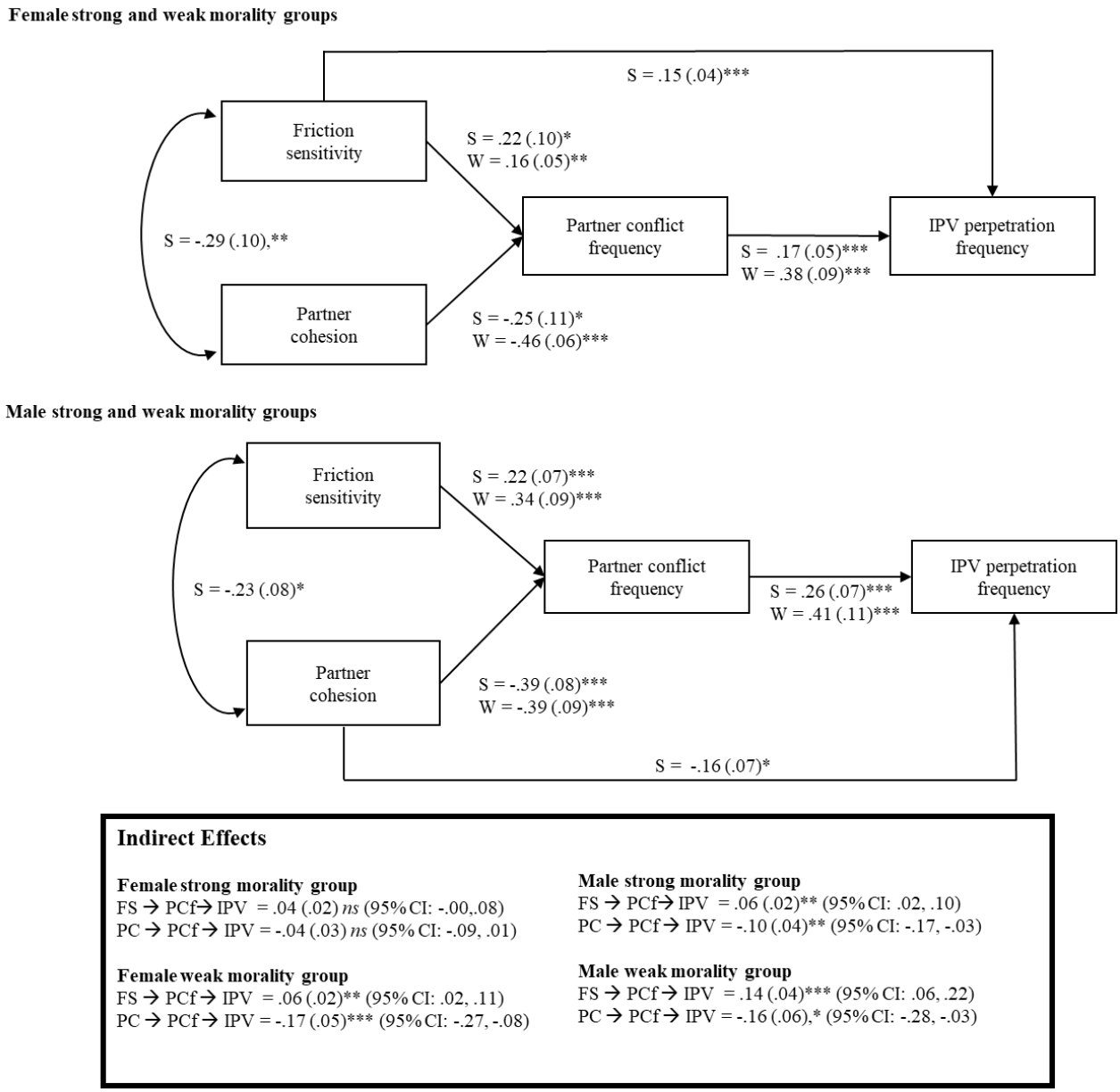

Figure 7.5. Combined gender-morality multiple-group path model with indirect effects.

* $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$
Note. STDYX results reported. Estimator = MLR. Standard Errors in parentheses. S = strong morality group; W = weak morality group; PC = partner cohesion; FS = friction sensitivity; PCf = partner conflict.

The analysis began with the specification of a multiple-group model in which the regression and correlation coefficients for each group were freely estimated. The initial saturated model was refined (whereby the non-significant paths were removed) to yield a more parsimonious model, and is shown in Figure 7.5.

Model fit of the final model was excellent: χ^2 (8) = 7.350, p = .4993, RMSEA = .000 (90 % confidence interval: .000 – .095), CFI = 1.000, TLI = 1.010, SRMR = .026. Visual inspection of the multiple-group model shows a difference in the direct paths retained for males and females. Namely, for females, the direct path between partner-specific friction sensitivity and IPV perpetration has been retained for strong IPV morality females, which replicates the full-sample multiple-group model presented in Section 7.1.2. Conversely, for males, the direct path from partner cohesion to IPV perpetration has been retained for strong IPV morality males. Notwithstanding these differences, the pattern of the regression paths that comprise the indirect paths from partner-specific friction sensitivity and partner cohesion to IPV perpetration follow a similar pattern for males and females. More specifically, high partner-specific friction sensitivity and low partner cohesion predict increased partner conflict, and increased partner conflict predicts increased frequency of IPV perpetration for both strong and weak IPV morality males and females.

Comparing the indirect effects, with regard to individuals with strong IPV morality, neither the effect from partner-specific friction sensitivity to IPV perpetration, nor the effect from partner cohesion to IPV perpetration are significant for females, but both are significant for males. However, this observed difference in the strength of the indirect effects between males and females may not be statistically significant. To test this, I used a test of moderated mediation, whereby I calculated the difference in the male and female coefficients for the indirect effects. As shown in the first column of Table 7.5, the difference in coefficients between males and females was not significant for either of the two indirect effects.

Table 7.5. *Moderated Mediation: Differences Between Males and Females in The Strength of The Indirect Effects for Strong and Weak Morality Groups*

	Difference in strength of indirect effect	
	Strong morality: males vs. females	**Weak morality: males vs females**
Indirect path	**B (SE)**	**B (SE)**
FC → PCf → IPV	0.01 (0.02) *ns*	-0.01 (.06) *ns*
PC → PCf → IPV	-0.02 (0.04) *ns*	-0.24 (0.19) *ns*

Note. B = unstandardized coefficient for difference in strength of indirect effect between males and females; PC = partner cohesion; FS = friction sensitivity; PCf = partner conflict.

For the individuals with weak IPV morality, the indirect effects are significant for both males and females. To examine whether the strength of the indirect effects differ between males and females, I once again used moderated mediation analysis to calculate the difference in the strength of the indirect effects between males and females. The reason being, while the mediation (indirect) effects are significant for both males and females with weak IPV morality, the effects may be stronger for one sex than the other. As shown in the second column of Table 7.5, for males and females with weak IPV morality, the difference in the coefficients for the indirect effects between males and females were not significantly different for either indirect path. Therefore, the strength of the indirect effects between partner-specific friction sensitivity and IPV perpetration, and partner cohesion and IPV perpetration are similar in strength for weak morality males and females.

Next, to assess whether the moderation effect of morality between partner conflict and IPV perpetration observed previously in Section 7.2.2 is replicated in the gender-morality multiple-group model, chi-square tests of structural invariance between strong and weak IPV morality groups were carried out separately on the path from partner conflict to IPV perpetration for males and females. The results are reported in Table 7.6.

Table 7.6. *Chi-Square Difference Between Strong and Weak Morality on the Path Between Partner Conflict and IPV Perpetration*

	Baseline model			**Nested model**			**Absolute difference**	
	df	χ^2	**SCF**	**df**	χ^2	**SCF**	$\Delta\chi^2$	**Δdf**
Females	8	7.35	1.0832	9	21.14	1.2431	7.262**	1
Males	8	7.35	1.0832	9	17.421	1.0977	9.196**	1

** $p \leq .01$
Note. SCF = Scaling correction factor.

A visual inspection of the path model for the female groups indicates that the path between partner conflict and IPV perpetration is stronger for weak IPV morality individuals than for strong IPV

morality individuals. This observation is confirmed by the results of the chi-square test of structural invariance. As shown in the first row of Table 7.6, the nested model yielded a worse model fit than the baseline model, indicating that the path from partner conflict to IPV perpetration is significantly stronger for weak IPV morality females than strong IPV morality females.

Turing to the male groups, once again, the coefficient representing the path between partner conflict and IPV perpetration appears stronger for weak IPV morality individuals than strong IPV morality individuals. A chi-square test of structural invariance confirms the observation. The findings presented in the second row of Table 7.6 show that the nested model produced a significantly worse model fit than the baseline model. Therefore, the path between partner conflict and IPV perpetration is significantly stronger for weak IPV morality males than strong IPV morality males.

The findings of the chi-square tests of structural invariance are further illustrated in Figure 7.6. and Figure 7.7. Both figures show that low conflict corresponds with low frequency of IPV perpetration for strong and weak IPV morality males and female, yet with increased conflict, weak IPV morality males and females are more likely to perpetrate acts of IPV than strong IPV morality males and females.[134] Consequently, these findings show that the moderation effect of IPV morality between partner conflict and IPV perpetration frequency holds across males and females, which further supports the generalisability of IPV morality as a key explanatory variable for IPV perpetration across genders.

[134] Note that the scales of the male and female graphs are different, which reflects the difference in average frequency of IPV perpetration reported by males and females.

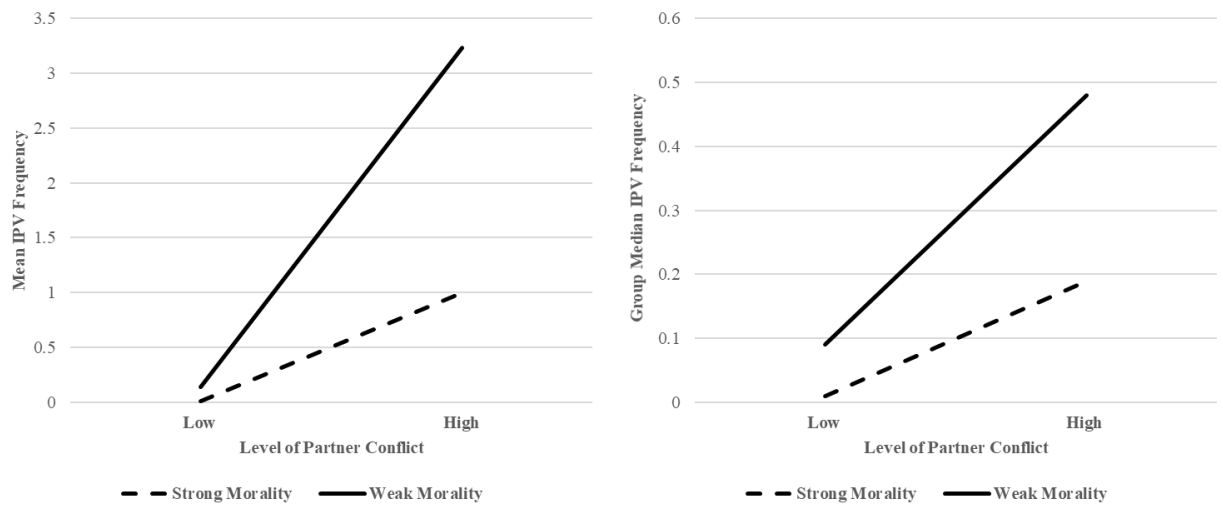

Figure 7.6. Depiction of the moderation effect of IPV morality on the path between partner conflict and IPV perpetration for females.

Note. Both partner conflict and morality have been dichotomised at the median.

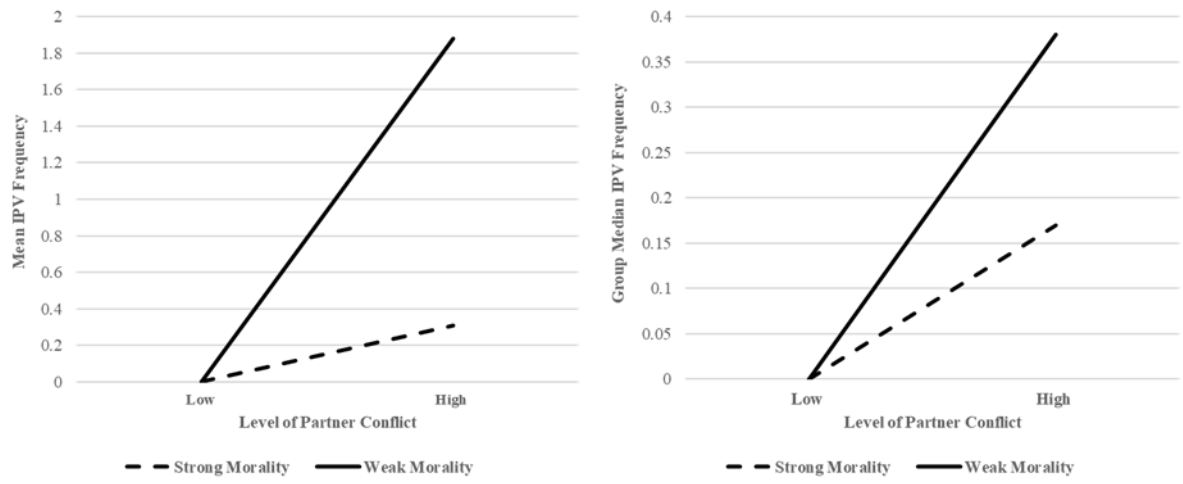

Figure 7.7. Depiction of the moderation effect of IPV morality on the path between partner conflict and IPV perpetration for males.

Note. Both partner conflict and morality have been dichotomised at the median.

Finally, because on average, females in this sample self-reported significantly more acts of IPV than males did, and significantly more females than males are classified as having weak IPV morality, I examined whether the moderation effect of IPV morality on the path between partner conflict and IPV perpetration *significantly differs* between males and females. In order to do so,

further chi-square tests of structural invariance were performed. First, invariance in the strength of the path between partner conflict and IPV perpetration for males and females with strong IPV morality was assessed, followed by a test of invariance for males and females with weak IPV morality. The results are presented in table 7.7.

Table 7.7. *Morality Multiple-Group Chi-Square Difference Between Males and Females on the Path Between Partner Conflict and IPV Perpetration*

	Baseline model			**Nested model**			**Absolute difference**	
	df	χ^2	**SCF**	**Df**	χ^2	**SCF**	**Δdf**	$\Delta\chi^2$
Strong	8	7.35	1.832	9	8.931	1.0053	1	2.661 *ns*
Weak	8	7.35	1.832	9	10.456	1.2127	1	2.098 *ns*

ns $p \geq .05$
Note. SCF = Scaling correction factor.

The first row of Table 7.7 shows that the path from partner conflict to IPV perpetration is invariant for males and females with strong IPV morality. Likewise, the second row of Table 7.7 shows that the path between partner conflict and IPV perpetration is also invariant between males and females with weak IPV morality. This finding indicates that IPV morality is an equally important explanatory variable for why both males and females are either violent or non-violent towards a partner. Thus, the root of the gender gap in the IPV frequency reported by the participants in this study appears to be in the greater proportion of females than males who have weak IPV morality; yet, *for both violent males and violent females, weak IPV morality is an equally key explanatory variable.*

These findings are reflected in Figure 7.8 and 7.9, particularly in the graphs depicting the group median IPV frequency: the parallel lines indicate the absence of a moderation effect.[135]

[135] It should be noted that while parallel lines indicate that a moderation effect is not statistically significant, non-parallel lines do not necessarily correspond with a significant effect (Field, 2005). Furthermore, the way in which the variables of an analysis are plotted can alter whether there appears to be a moderation effect or not. This is illustrated in the comparison between the graphs depicting the mean frequency and the median frequency in Figure 7.8 and Figure 7.9. The non-parallel lines of the graphs showing the mean IPV frequency suggest the presence of a moderation effect of gender, while the parallel lines of the graphs showing the median IPV frequency suggest that there is not a

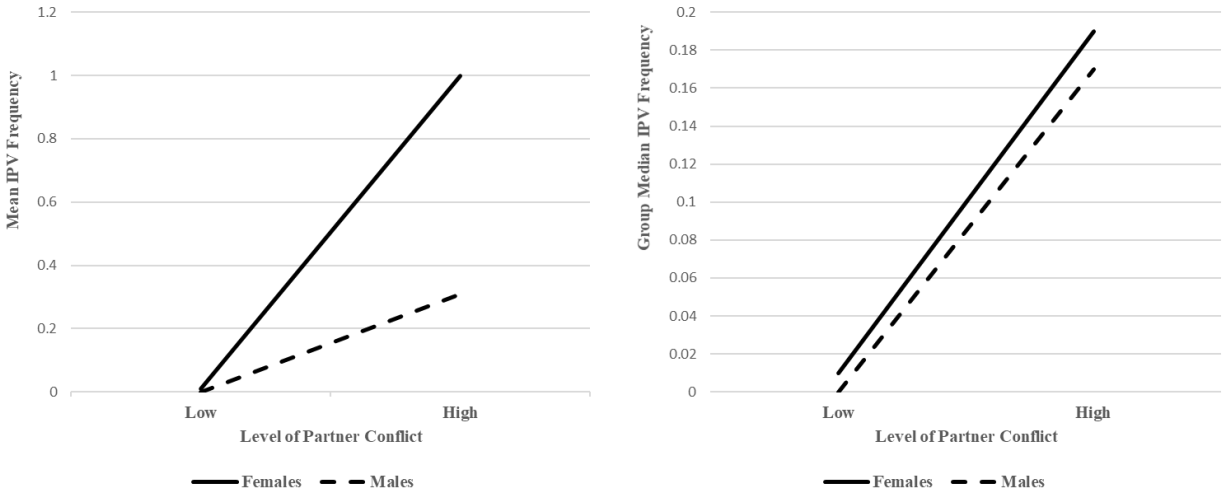

Figure 7.8. Depiction of the effect of strong morality on the path between partner conflict and IPV perpetration for males and females.

Note. Partner conflict has been dichotomised at the median.

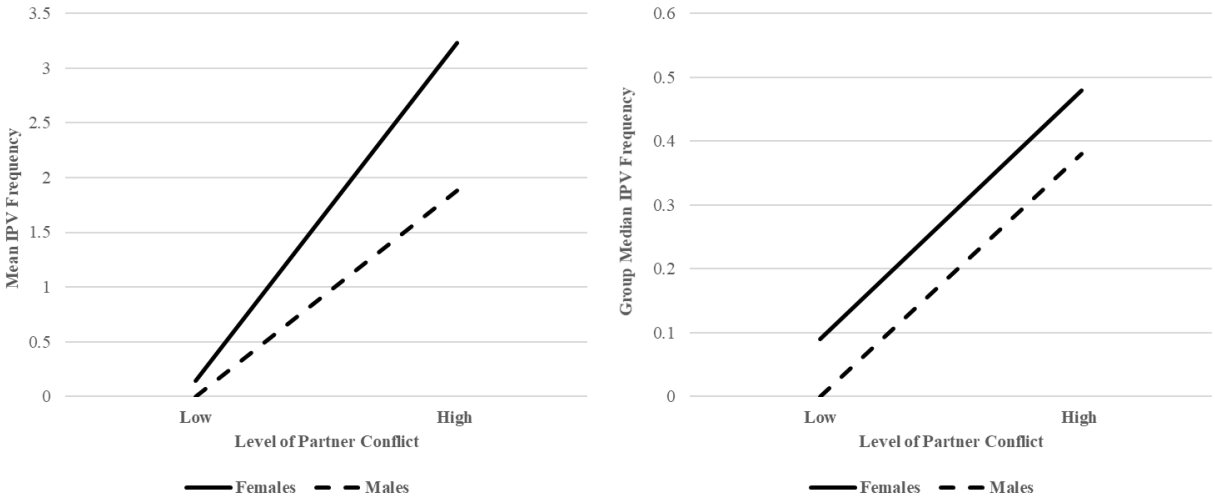

Figure 7.9. Depiction of the effect of weak morality on the path between partner conflict and IPV perpetration for males and females.

Note. Partner conflict has been dichotomised at the median.

moderation effect. Therefore, visual assessment of the presence or absence of a moderation effect must be bolstered by statistical analysis.

7.2.4 Morality: Section Summary

This section has examined both the broad influence of IPV morality across the motivation and perception-choice processes represented in the path model, and the more specific role of IPV morality between the experience of motivation (partner conflict) and the perpetration of moral rule-breaking action. The findings of this section provide strong evidence that personal IPV morality has a significant influence on whether or not individuals perpetrate IPV. First, it was shown that personal IPV morality has a general influence over the motivation and perception-choice processes, whereby the indirect effects from partner-specific friction sensitivity and partner cohesion to IPV frequency are significantly stronger for weak IPV morality individuals than strong IPV morality individuals. Second, the more specific test of the role of IPV morality between the experience of motivation (partner conflict) and the perpetration of moral rule-breaking action found that individuals with weak IPV morality are significantly more likely to perpetrate acts of IPV when frequently engaged in conflict than those with strong IPV morality.

Gender specific analyses were also performed and found that significantly more females than males were categorised as having weak IPV morality. Yet, the significant moderating influence of IPV morality was replicated in the gender-morality multiple-group model and the influence of IPV morality was found to be *equivalent* in males and females. Thus, the findings of the gender-morality multiple-group analysis provide evidence that the processes represented in the model hold across males and females. It follows, therefore, that the gender gap in IPV perpetration in the female direction is likely to be grounded in the observation that more females than males have weak IPV morality; yet, where both males and females are violent, weak IPV morality holds equal explanatory value. Those with weak IPV morality are more likely to break the moral rules prohibiting violence against a partner, irrespective of whether they are male or female.

7.3 Analysis and Results: Summary

Throughout this chapter I have systematically addressed the research questions set out in Chapter 6. In the first part of the chapter, I showed that both high partner-specific friction sensitivity and low partner cohesion translate into increased levels of IPV perpetration by influencing the level of partner conflict. Furthermore, this finding was replicated in the multiple-group analysis in which

group models for each gender were specified. Moderated mediation analyses showed that the indirect effects were not significantly different for males or females, thus providing evidence of the generalisability of the model across genders.

In the second part of the chapter, I used multiple-group path analysis to examine whether the strength of IPV morality had a global influence across the indirect paths of the model, and whether the strength of IPV morality influenced individuals' responses to partner conflict (motivation for IPV). In line with the suppositions of SAT, both high partner-specific friction sensitivity and low partner cohesion were more likely to translate into more frequent partner conflict, and thus more frequent IPV perpetration, for individuals with weak IPV morality than those with strong IPV morality. Thus, IPV morality appears to have a global influence across both the motivation and causal processes specified by the SAT framework. The results of the second part of the morality analysis also showed that even when engaged in frequent partner conflict (i.e. frequently motivated to perpetrate IPV), individuals with strong IPV morality were significantly less likely to perpetrate acts of violence against a partner than individuals with weak IPV morality. Thus, this finding is taken in support of SAT's supposition that motivation is necessary for moral rule-breaking, but is not sufficient. Rather, it appears that individuals' personal moral rules and moral emotions about IPV influence their response to motivation by guiding their perception of action alternatives.

Finally, the moderating influence of IPV morality was replicated in both males and females. Although more females than males had weak IPV morality (which corresponds with the higher prevalence and frequency of IPV reported by females), both males and females with weak IPV morality were more likely to perpetrate IPV than strong IPV morality males and females.

In summation, the analyses presented in this chapter addressed two key aims of this thesis: first, to examine whether the explanatory power of the SAT framework extends to IPV; second, whether the framework can explain both male and female IPV perpetration. Taken together, the findings of the analyses presented in this chapter have indeed illustrated that IPV can be explained within a theoretical framework of moral rule-breaking, thus providing evidence in support of SAT's assertion that all acts of moral rule-breaking can be explained within its framework. Further, the gender analyses have provided evidence that the SAT framework is equally applicable to explain IPV perpetrated by males and females. In the next and final part of this thesis I discuss the

implications of these findings in relation to previous research and theory, and provide suggestions for future research.

PART 5: Discussion and Conclusion

8: Discussion

In this concluding chapter, I provide a summary and discussion of the aims and findings of this thesis. I consider how the findings relate to the theoretical suppositions of situational action theory (SAT) and knowledge gained from pertinent intimate partner violence (IPV) literature. Within this chapter, I also consider the policy implications of the research findings, and discuss limitations and avenues for future research.

8.1 Overview of Research and Summary of Key Findings

A number of aims guided the research presented in this thesis. First, a principal aim of this thesis was to examine whether IPV perpetration could be explained within the framework of a general theory of crime, namely SAT. It has been observed that explanations of IPV are typically couched in specialised theories of IPV, rather than general theories of crime (Fagan & Browne, 1994; Hotaling et al., 1990; Moffitt et al., 2000; Piquero et al., 2014; Smithey & Straus, 2004). Yet, IPV is recognised as a form of criminal violence, and thus my contention throughout this thesis has been that it should be possible to explain IPV within the framework of a general theory of crime (see Chapter 1). Therefore, the guiding focus of this thesis was to test whether SAT *could* explain IPV perpetration. In order to do so, this thesis has concentrated on a key construct of SAT: morality. Morality is positioned at the centre of the explanatory framework of SAT: acts of crime are defined as acts of moral rule-breaking, and personal morality is the main *causally relevant* variable (e.g. Wikström, 2010a). Thus, a key contribution of this thesis has been to illustrate both theoretically (see in particular, Chapter 2 and Chapter 3), and empirically (see Chapter 7), how IPV can be defined and explained as a type of moral rule-breaking behaviour

The second key aim of the research was to examine whether the framework of SAT could explain both male and female IPV perpetration. This aim addressed two 'debates': the first is whether separate theories are needed to explain male and female IPV perpetration, and the second is whether general theories of crime can explain both male and female crime. SAT was developed to explain the causes of crime (moral rule-breaking), irrespective of whether the perpetrator is male or female (Wikström, 2011). However, there have been few empirical tests of this supposition (noteable exceptions being, Hirtenlehner & Treiber, 2017; Weerman et al., 2015), and none have been carried out in relation to IPV. Thus, in testing whether SAT can be applied to the explanation of both male and female IPV, this thesis has provided a novel contribution to both the IPV and SAT literatures.

The third broad aim of this research was to examine the role of motivation, as conceptualised by SAT, in IPV perpetration. More specifically, the aim was to test the argument made by Wikström and colleagues (2012, p. 23) that motivation is "necessary but not sufficient" for acts of moral rule-breaking to occur. A principle of SAT is that motivation is needed to instigate the causal process (of which personal morality is a crucial component). SAT specifies two types of motivation process: temptation and provocation. This thesis concentrated on provocation as the instigator of IPV (see Chapter 4). I integrated the theoretical constructs of the provocation process in SAT and

knowledge of pertinent correlates of IPV perpetration to define partner conflict (arguments and disagreements in response to frictions) as the experience of provocation, and the tendency to experience anger towards a partner (defined within this thesis as partner-specific friction sensitivity) and low partner cohesion, as key factors leading to partner conflict. In doing so, I illustrated how the provocation process in SAT can be applied to understanding how pertinent correlates of IPV perpetration contribute to an individual becoming motivated (provoked) to use violence against a partner.

In examining the role of motivation (i.e. provocation) in IPV perpetration, this thesis tested whether the components of the provocation process that were theorised to contribute to a person becoming provoked actually resulted in provocation (as defined in this thesis), and subsequently whether provocation translated into IPV perpetration. However, of crucial importance to SAT, this thesis examined how IPV-*specific* morality influenced whether people responded to provocation with violence against a partner. Namely, whether individuals with weak IPV morality were more likely to respond to provocation with violence than those with strong IPV morality. While motivation is included as a necessary part of the explanation of moral rule-breaking in SAT, there is a paucity of empirical SAT research that has directly tested the contention that motivation is "necessary but not sufficient" to explain crime. Thus, this thesis has addressed a gap in this area of the SAT literature.

To address the aims of the thesis, data was collected from males and females between 24 and 25 years of age, who had taken part in Wave 8 of PADS+, a study designed to test SAT. Generalised measures of partner-specific friction sensitivity, perception of partner cohesion, and IPV morality were used to capture the key theoretical constructs. A measure of partner conflict captured the level (frequency) of partner conflict in response to partner frictions in the previous year, and a measure of IPV perpetration captured the frequency of IPV perpetration in the previous year.

8.1.1 Summary of Key Findings

Both males and females reported IPV perpetration, with significantly more females reporting a prevalence of IPV as well as an overall higher frequency of IPV perpetration than males. The finding that both males and females perpetrated IPV reflects the findings of the large body of IPV literature that has found evidence of gender symmetry in IPV perpetration (see e.g. the meta-analysis by Archer, 2000). Furthermore, the finding that *more* females than males perpetrated IPV is in line with the findings of Wendi Johnson and colleagues (2014) who observed a gender gap in

the trajectories of IPV perpetration in the female direction: from age 17 through to the late 20s, the female trajectory was consistently higher than the male trajectory.

Of particular theoretical importance, this study found that for both males and females, high partner-specific friction sensitivity and low partner cohesion translated into increased IPV perpetration frequency by influencing the level of partner conflict. Furthermore, it was found that for both males and females, IPV morality significantly moderated the relationship between partner conflict and IPV, whereby those with weak IPV morality were significantly more likely to perpetrate IPV in response to high partner conflict than those with strong IPV morality. IPV morality was also found to have a global influence on the model, namely individuals with weak IPV morality were more likely to become provoked (engage in frequent partner conflict) and perpetrate more acts of IPV than those with strong IPV morality. This pattern was also replicated in the male and female group models.

These findings provide evidence in support of a number of SAT's suppositions. The findings provide evidence in support of the supposition that motivation is "necessary but not sufficient" for moral rule-breaking to occur (Wikström et al., 2012, p. 23). While individuals with high partner-specific friction sensitivity and low partner cohesion were more likely to engage in frequent conflict with their partners, and thus experience frequent provocation, whether provocation translated into IPV perpetration was influenced by personal IPV morality. Thus, the finding that IPV morality moderated the relationship between partner conflict (provocation) and IPV perpetration provides evidence in support of SAT's argument that morality is pivotal in guiding people's perception of action alternatives (e.g. Wikström, 2006). More specifically, it can be inferred that being motivated (provoked) is not sufficient to *cause* a person to perpetrate violence against a partner, a person will only respond violently to provocation if he or she *perceives* violence as an action alternative guided by his or her morality.

The finding that the model tested in this research held for both males and females provides evidence that the explanatory framework of SAT is equally applicable to understanding the causes of male and female IPV perpetration. While more females had a prevalence of IPV perpetration than males, and more females had weak IPV morality than males, the moderating influence of IPV morality was the same across males and females. Thus, *both males and females with weak IPV morality were more likely to perpetrate acts of IPV than their strong IPV morality counterparts.*

In summary, these findings provide evidence that IPV perpetration can be explained within the framework of SAT, and that the framework is able to explain both male and female IPV perpetration.

8.2 Situating the Findings Within the IPV Literature

The findings of the research presented in this thesis are clearly in accordance with the suppositions of SAT, and make clear contributions to the empirical and theoretical SAT literature. However, this thesis has also drawn on pertinent IPV literature to inform the application of the SAT framework to the study of the causes of IPV. Thus, in this section, I highlight the relevance of the findings of this research to the IPV literature.

8.2.1 Motivation

The finding that high partner-specific friction sensitivity, low partner cohesion (e.g. low trust and respect, and lack of cooperation) and high partner conflict translated into increased IPV frequency, is in line with previous research that has examined the antecedents of IPV perpetration. In particular, previous research has shown than a heightened propensity to experience anger is positively associated with IPV, with higher levels of anger being associated with more frequent and severe violence (Eckhardt et al., 2008; Murphy et al., 2007). The experience of anger is also associated with partner conflict, and research has shown that conflict with a partner is a frequent antecedent of partner violence (Cascardi & Vivian, 1995; Dobash & Dobash, 1984; Straus et al., 2006 [1980]). Factors that represent low partner cohesion, such as jealousy, distrust, and lack of cooperation (e.g. not helping one another), have also been identified as risk factors for IPV perpetration (e.g. Dobash & Dobash, 1984; Dobash et al., 2007; Langhinrichsen-Rohling et al., 2012; Makepeace, 1981; Straus et al., 2006 [1980]). However, in analysing these correlates of IPV perpetration within the context of SAT's provocation process, this thesis has provided a framework for understanding *how* (the process by which) these correlates of IPV may contribute to a person perpetrating an act of violence against a partner.

The finding that for both males and females, high partner-specific friction sensitivity and low partner cohesion translated into increased IPV perpetration by influencing the level of partner conflict, also contributes to knowledge about female motivation for IPV. In particular, research

that has examined the relationship between anger propensity and IPV perpetration has studied predominantly male samples (e.g. Barbour et al., 1998; Holtzworth-Munroe & Smutzler, 1996). Thus, in demonstrating that high partner-specific friction sensitivity (which aligns with a propensity to experience anger) influences male as well as female motivation for IPV, this thesis contributes to addressing this deficit in the IPV literature.

While some IPV researchers (e.g. Boyle & Vivian, 1996; Eckhardt et al., 1997) have suggested that using partner-specific measures of anger propensity should be used when studying the relationship between anger and IPV perpetration, there is a paucity of research that has actually implemented this recommendation (although for exceptions see, Boyle & Vivian, 1996; Holtzworth-Munroe et al., 2000). Thus, there is little knowledge regarding whether partner-specific measures facilitate a more accurate understanding of the relationship between anger propensity and IPV perpetration. This study employed a partner-specific measure of friction sensitivity, partly inspired by the aforementioned literature, but also because a partner-specific measure of friction sensitivity is conceptually compatible with the SAT concept of action-specific moral rules, *and* the supposition that individuals vary in their particular sensitivities to frictions (Wikström, 2006; Wikström, et al., 2012; Wikström & Treiber, 2009).

Thus, it was reasoned that individuals also vary in their sensitivity to particular types of frictions, and a partner-specific measure of friction sensitivity was employed in this thesis. The findings of this research showed that increased partner-specific friction sensitivity translated to increased IPV perpetration by influencing the level of partner conflict. However, because a general measure of friction sensitivity was not included for comparison (as in the studies by Boyle & Vivian, 1996; Holtzworth-Munroe et al., 2000), it is not possible to establish whether a partner-specific measure of friction sensitivity provided a more accurate understanding of the relationship between friction sensitivity and IPV than a general measure would have. Such a comparison would be useful in future research.

8.2.2 Morality

In Chapter 2 and Chapter 3, I aligned SAT's concept of moral rules with the concept of attitudes, and noted that research has often found that attitudes condoning IPV are associated with IPV perpetration (see e.g. the meta-analysis by Stith et al., 2004). However, I also observed that violent attitudes are often included as a predictor variable without the specification of *how* (the process by

which) such attitudes contribute to IPV perpetration. For example, simply holding attitudes that condone violence against a partner does not 'move' a person to commit such an act of violence. To understand how violent attitudes contribute to a person perpetrating a specific violent action, a mechanism by which they directly influence behaviour must be specified (Wikström, 2017; Wikström, et al., 2012). In SAT, it is posited that personal morality contributes to the explanation of moral rule-breaking (e.g. acts of IPV) by guiding a person's perception of action alternatives (Wikström, 2006, 2014). This research found that weak IPV morality was associated with IPV perpetration, and thus this finding aligns with the aforementioned IPV research that has found violent attitudes to be associated with IPV perpetration. However, the current research provides conceptual clarity to the relationship by specifying *how* morality (or attitudes) may contribute to the explanation of why people perpetrate IPV.

The finding that more females than males had weak IPV morality may be surprising to some readers. In particular, the finding is likely to be counter to the expectations of those who study IPV through the lens of 'feminist' theories of IPV. While there are different manifestations of feminist theory within the IPV literature, and some feminist scholars acknowledge that females can and do perpetrate IPV (see e.g. DeKeseredy & Dragiewicz, 2007; M. P. Johnson, 2011), the underlying assumption is that IPV is a predominantly male behaviour, the roots of which are patriarchal social structures and ideology (e.g. Dobash et al., 1992; Dobash & Dobash, 1979; Straus, 1976; Yllö & Straus, 1990). More specifically, the feminist view of IPV is that patriarchy generates attitudes that allow violence to occur, and permits violence as a means of reasserting or establishing power and control (Pence, 1999). While the males in this research with weak IPV morality may hold views of male entitlement, this perspective does not explain female weak IPV morality.

A contrasting perspective, which is more in line with the finding of this study, is that males have distinct rules about the use of violence, namely that violence between men is sanctioned as part of masculine identity, whereas violence against a female partner is not permissible; indeed, it is suggested that male to female violence may hurt masculine identity (Archer, 2000a; McNeely, Cook, & Torres, 2001; Renner & Whitney, 2012). Furthermore, previous research has found that both males and females consider female perpetrated violence to be more acceptable than male perpetrated violence (Dardis, Edwards, et al., 2015; Feld & Felson, 2007; O'Keefe, 1997; Taylor & Sorenson, 2005). While this thesis did not directly measure whether participants considered male or female IPV to be more or less acceptable, the finding that more females than males had weak

IPV morality is *indicative* of a more accepting view of female IPV and a less accepting view of male IPV, and thus is interpreted as being consistent with the findings of previous related research.

8.3 Policy Recommendations

Wikström (Wikström, 2007a; Wikström et al., 2012) has argued that in order to develop effective methods of preventing and treating the problem of crime, it is necessary to identify the variables that are most causally relevant, and to understand the mechanisms by which these variables result in people committing acts of crime. The findings of the research presented in this thesis show that high partner-specific friction sensitivity, low partner cohesion, partner conflict (provocation), and IPV morality all contribute to understanding why some people are more likely to perpetrate IPV than others. However, I suggest that IPV morality is the most suitable target for effective prevention and intervention policy. By contrast, partner-specific friction sensitivity, partner cohesion and partner conflict are more suitable targets for individual or relationship therapy.

While high anger propensity (i.e. friction sensitivity), markers of low partner cohesion (e.g. lack of trust), and partner conflict are associated with IPV, this research has shown that these elements of motivation for IPV do not necessarily translate into IPV. Similarly, research indicates that many IPV perpetrators do not have pathological levels of anger propensity (Eckhardt et al., 2008; Murphy et al., 2007), and family conflict theory contends that partner conflict in and of itself is not problematic, indeed, some level of conflict is considered 'normal' (Gelles & Straus, 1979; Straus, 1979; Straus et al., 2006 [1980]). Thus, while high partner-specific friction sensitivity and low partner cohesion contribute to partner conflict (provocation), and partner conflict serves to instigate the causal process leading to IPV, the experience of provocation does not itself cause a person to perpetrate IPV. As the research in this thesis has shown, many people experience conflict without responding with violence. Rather, IPV morality is key to understanding how people respond to partner conflict (provocation), and thus I contend that IPV morality is the most suitable focus of policy efforts to reduce the problem of IPV.

Moral education is the process by which people acquire personal morality (Wikström et al., 2012; Wikström & Treiber, in press). This process can occur developmentally from childhood, via social learning (e.g. observation and modelling) of the rule-following behaviour of adults (Wikström et al., 2012; Wikström & Treiber, in press). Thus, in order to encourage the development of strong

IPV morality, implementing policies of moral education in schools is recommended. Similarly, the family is recognised as a key institution in which children are socialised to consider violence as either right or wrong (Straus et al., 2006 [1980]; Wikström & Treiber, 2016). Thus, advertising campaigns could be used to encourage parents to model non-violent behaviour and to facilitate strong IPV morality by teaching children that violence against a partner breaks moral rules of conduct.

With regard to effecting change in people's IPV morality, policies targeted at changing social norms regarding the acceptability of partner violence are recommended. This may take the form of raising people's awareness that violence against a partner is *criminal* violence, and campaigns highlighting the problem and unacceptability of IPV. This is not a new idea. The women's movement was pivotal in raising awareness of violence against women and influenced changes in criminal justice and social views about violence against women (Straus, 2009). More recently, the World Health Organization (2009) has advocated policies and interventions that challenge cultural norms and personal attitudes that condone violence, particularly men's attitudes towards violence against women. However, the fact that both men and women perpetrate IPV, and as this study has shown, both men and women can have weak IPV morality, points to the need for a more gender inclusive approach to changing social norms regarding violence against a partner. The focus should be on the "moral wrong of assaulting a partner" (Straus, 1999, p. 21), irrespective of whether the violence is against a female or a male.

8.4 Limitations and Future Research Recommendations

A limitation of this research is that it did not study the context of the violent incidents that participants reported, and thus the circumstances leading to the motivation for specific acts of violence could not be measured. Likewise, the setting in which the violence occurred could not be measured. To this point, some scholars who take a gender asymmetry view of IPV have been critical of research that uses quantitative measures of IPV perpetration, such as the CTS, for not accounting for the context and meaning of the violence reported (DeKeseredy, 1999; DeKeseredy & Schwartz, 1998; Dobash & Dobash, 2004; Dobash et al., 1992; Myhill, 2017; for an overview of the criticisms see, Langhinrichsen-Rohling, 2010). Proponents of the gender asymmetry perspective of IPV often argue that neglect of the context and nature of violent acts is responsible for the apparent gender symmetry in IPV found by studies that employ quantitative measures of

IPV such as the CTS. For example, Dobash and colleagues (1992) suggested that certain (female perpetrated) behaviours can be grossly misinterpreted in studies using the CTS; they used the example of a 'slap', which they suggested could refer to anything from an innocuous slap of the hand "chastising a dinner companion for reaching for a bite of one's dessert to a tooth-loosening assault intended to punish, humiliate, and terrorize" (p. 79). Thus, Dobash and colleagues (1992) argue that in studies using the CTS (or similar), many women are reported to be violent, when in fact they were being 'playful'.

However, it should be clarified that the CTS is presented to those completing the assessment as a survey of conflict (as it was in this study), and therefore it seems unlikely that participants would confuse playful behaviour with malevolent behaviour occurring within a conflict. Likewise, Archer (2000b) observes that "The CTS is … clear in contextualizing acts as occurring in response to an argument or disagreement between partners. It is not the case that they could refer to other contexts such as play fighting, or unprovoked assaults" (p. 699). Similarly, while a limitation of the current research is that the quantitative measure of IPV perpetration did not measure the context of violence, participants were clearly asked to report on conflict and violence and to not include 'playfighting' in their responses.

A further related criticism could be that some of the violence reported was perpetrated in self-defence or retaliation to victimisation. In particular, female IPV perpetration is frequently interpreted as self-defensive or retaliatory violence (e.g. Allen et al., 2009; Bible et al., 2002; Dasgupta, 1999; Walter S. DeKeseredy et al., 1997; Dobash & Dobash, 1984; Pence & Paymar, 1993; Swan et al., 2008; Swan & Snow, 2002). Although research has shown that both males and females report perpetrating violence in self-defence (e.g. Bookwala, Frieze, Smith, & Ryan, 1992; Elmquist et al., 2014, 2016; Hines & Douglas, 2010; Langhinrichsen-Rohling et al., 2012; Stuart et al., 2006).

While some of the violence reported by the participants of this study could have been in self-defence, this does not alter the interpretation of the findings. First, responding to one's own victimisation with violence still represents a violent response to a provocation. Second, it can be argued that IPV morality is still important in guiding a person's action alternatives when he or she is violent in response to his or her own victimisation. For example, there are likely some people who think that it is wrong to hit a partner even if the partner is violent first, and thus would not respond to their own victimisation with violence. Other people may consider that violence in

response to their own victimisation is acceptable. Both scenarios reflect a person's IPV morality, namely his or her moral rules and moral emotions in relation to the acceptability of IPV.

The research reported in this thesis used generalised measures of individual constructs of interest, which have been used to make inferences about how people are likely to behave in particular circumstances, namely conflict with a partner (regarding the rationale for using generalised measures to test SAT see, Wikström et al., 2012). However, future research could use alternative methods that more precisely capture the situational dynamics leading to IPV actions. In particular, the space-time budget method developed and used by PADS+ could provide more accurate data on the situational dynamics of IPV. The space-time budget is an hour-by-hour measure of how, where, and with whom people spend their time (for detail, see Wikström et al., 2012). The space-time-budget data used in combination with generalised measures of personal characteristics, such as morality, allows for a more realistic analysis of the situational dynamics of moral rule-breaking (see further, Hardie, 2017; Wikström et al., 2012). Up to this point, the space-time-budget has not gathered targeted data on IPV; however, future waves of PADS+ data collection could include IPV as a particular behaviour of interest when collecting space-time-budget data.

Alternatively, future studies could supplement the quantitative measures used in this thesis with qualitative data regarding partner violence events. Likewise, the use of a randomised scenario method in which different permutations of a 'provoking scenario' are administered to participants, used in conjunction with the measures of partner cohesion, partner-specific friction sensitivity and IPV morality, would allow for a more comprehensive examination of the relationship between these constructs and the features of a provocation setting in leading to IPV actions.[136]

A final recommendation for future research concerns the theoretical and empirical development of the construct of friction sensitivity in SAT. In Chapter 4, I described how SAT considers a person's friction sensitivity to be the individual level characteristic that represents a person's tendency (predisposition) to perceive a friction as intentionally antagonistic, and to experience anger in response to the friction (Wikström & Treiber, 2009). Further, I noted that whether a person attributes antagonistic intent to the source of a friction is contingent on a process of perception and evaluation (Wikström, 2006), which aligns with the concept of appraisal processes in the psychology of emotion literature (e.g. Lazarus, 2001; Scherer, 2001).

[136] Regarding the previous use of a randomised scenario method in PADS+ see Wikström and colleagues (2012).

However, appraisal processes do not necessarily result in an accurate evaluation of the external stimulus, due to, for example, information-processing deficits (Lazarus, 2001; Roseman & Smith, 2001). Likewise, Novaco and Welsh (1989) describe a cognitive processing approach to understanding anger, and submit that anger "can usefully be understood with regard to information processing errors and perceptual/behavioral scripts for anger and aggression" (p. 48). In a theoretical discussion of how SAT can be applied to violent moral rule-breaking, Wikström and Treiber (2009) also suggest that individuals' ability to accurately perceive and interpret the intent of the source of frictions may be shaped by "their *perceptual biases*" (p. 85, emphasis in original).

Wikström and Treiber (2009) point to the hostile attribution bias (HAB; e.g. Nasby et al., 1980) as a pertinent perception bias that can influence the likelihood of a person experiencing anger and thus becoming provoked. The concept of HAB is associated with the social-information processing models of behaviour developed and applied to explain the social skills deficits that underlie a number of maladaptive behaviours, particularly aggressive behaviour generally (Huesmann, 1998) and aggressive behaviour in children (Dodge & Coie, 1987); a model of social information processing has also been applied to IPV (Holtzworth-Munroe, 1992).

The HAB refers to the tendency of a person to "erroneously attribute hostility to the social stimuli that they confront" (Nasby et al., 1980, p. 466), particularly in ambiguous situations, where it is not clear whether the intent of the stimulus is benign or hostile (Dodge, 2006).[137] It follows that perceptual biases, particularly a HAB, may influence a person's appraisal of a particular friction as antagonistic, and thus may contribute to a person's sensitivity to frictions (Wikström & Treiber, 2009). However, perceptual biases, such as HAB are not formally integrated into the SAT framework. Thus, future work could test whether a HAB contributes to a person's friction sensitivity, and thus add theoretical depth and empirical knowledge to the process of provocation as set out in SAT.

Finally, it is acknowledged that IPV is not always motivated by provocation. In particular, research has shown that both males and females also cite motivations for IPV related to power and control

[137]The HAB has been found to be associated with aggressive behaviour in children (Crick & Dodge, 1996; Dodge, 1980; Dodge & Coie, 1987; Nasby et al., 1980; Orobio de Castro, Veerman, Koops, Bosch, & Monshouwer, 2002), adolescent juvenile offenders (Dodge, Price, Bachorowski, & Newman, 1990) and adults (Bailey & Ostrov, 2007; Copello & Tata, 1990; Epps & Kendall, 1995). In particular, HAB is associated with reactive (emotionally motivated) aggression (Bailey & Ostrov, 2007; Crick & Dodge, 1996; Dodge & Coie, 1987; Dodge et al., 1990). Of relevance to the context of the current study, a HAB has been found in studies of male IPV perpetrators (Eckhardt et al., 1998; Holtzworth-Munroe & Hutchinson, 1993; Tonizzo, Howells, Day, Reidpath, & Froyland, 2000).

(for a review see, Langhinrichsen-Rohling et al., 2012). These motivations would be more appropriately analysed within SAT's motivation process of temptation, and is a potential avenue for future research.

8.5 Conclusion

The underlying principle that has guided the research presented in this thesis is that partner violence is criminal violence, and thus it should be possible to understand the causes of IPV within the framework of a general theory of crime. It follows that the key aims of this thesis have been to apply a criminological theory of the causes of crime to IPV, and to examine whether the explanatory framework holds across males and females. To address these aims I used SAT, a general criminological theory of moral rule-breaking, as the theoretical framework of this research.

In this thesis I have defined acts of IPV as acts of moral rule-breaking, and identified IPV morality as a key explanatory variable in understanding why both males and females use violence against a partner. In doing so I have provided evidence that IPV can be explained within a general theory of crime (i.e. SAT), and that the framework of SAT can be applied to understanding the causes of both male and female IPV. Within this thesis I also examined the role of provocation as the motivation for IPV, and provided evidence that while provocation is often necessary for IPV to occur, it is not sufficient. Rather, personal IPV morality influences how a person responds to provocation. Thus, the most significant finding of this research is that IPV morality is crucial to understanding how and why some people (males and females) respond to provocation with violence while others do not.

Finally, this thesis has presented the first application of SAT to the understanding and explanation of IPV. Thus, this thesis has contributed to the theoretical and empirical SAT literature, but has also contributed to the IPV literature by illustrating that the causes of IPV can be understood and explained within a general theory of moral rule-breaking.

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Appendices

Appendix A

PADS+ Physical Partner Violence Scale

(Adapted from the CTS and CTS2, as noted in Chapter 5)

Instructions read aloud by the researcher:

Sometimes arguments may become physical when people get really angry, and people may shout at, push or hit their partner. The next few questions ask about how common this was in your relationship with <u>any</u> partner in 2014.

Couples have many different ways of settling their differences and your answers are completely <u>confidential</u>. They will not be passed on to anyone, so please be <u>honest</u>.

Do not include play fighting or messing around in your answers.

The scale is on the following page.

Instructions written at the beginning of the scale:

During **2014**, how many times **did you** do the following things to a partner of yours?

	Never	**Once**	**Twice**	**3-5 times**	**6-10 times**	**11-20 times**	**20+ times**
Pinch him/her pull his/her hair, or scratch him/her	☐	☐	☐	☐	☐	☐	☐
Push or shove him/her	☐	☐	☐	☐	☐	☐	☐
Slap or back-hand him/her	☐	☐	☐	☐	☐	☐	☐
Hit or kick him/her	☐	☐	☐	☐	☐	☐	☐
Head-butt him/her	☐	☐	☐	☐	☐	☐	☐
Beat him/her up (e.g., hit and kick you repeatedly)	☐	☐	☐	☐	☐	☐	☐
Strike him/her with a blunt weapon (e.g., bat)	☐	☐	☐	☐	☐	☐	☐
Strike him/her with a sharp weapon (e.g., knife, broken bottle)	☐	☐	☐	☐	☐	☐	☐

Appendix B

PADS+ Partner Conflict Scale

Instructions read aloud by the researcher:

No matter how well couples gets along, there are times when they disagree, get annoyed with each other or fight.

Please answer the following questions about any arguments or disagreements that you may have had with any partner in 2014.

Remember that when we say 'partner' we mean someone who is more than just a friend and who you were or have been in a romantic and/or sexual relationship with for some time.

The scale is on the following page.

Instructions written at the beginning of the scale:

How often were you involved in an argument or conflict with **<u>any</u>** partner in the year **<u>2014</u>** for the following common reasons?

	Never	**Some-times**	**Often (every month)**	**Very often (every week)**
Something I said annoyed my partner	☐	☐	☐	☐
Something my partner said annoyed me	☐	☐	☐	☐
I was flirting with someone else	☐	☐	☐	☐
My partner was flirting with someone else	☐	☐	☐	☐
I was unfaithful to my partner	☐	☐	☐	☐
My partner was unfaithful to me	☐	☐	☐	☐
I wanted to do an activity with my partner that he or she did not want to do (e.g. cinema, pub, gym, watch a TV programme).	☐	☐	☐	☐
My partner wanted to do an activity with me that I did not want to do (e.g. cinema, pub, gym, watch a TV programme).	☐	☐	☐	☐
The clothes I was wearing/wanted to wear	☐	☐	☐	☐
CONTINUE TO THE NEXT PAGE				

	Never	**Some-times**	**Often (every month)**	**Very often (every week)**
The clothes my partner was wearing/wanted to wear	◻	◻	◻	◻
I drank too much alcohol/got drunk	◻	◻	◻	◻
My partner drank too much alcohol/got drunk	◻	◻	◻	◻
My use of drugs	◻	◻	◻	◻
My partner's use of drugs	◻	◻	◻	◻
I spend too much time with my friends	◻	◻	◻	◻
My partner spends too much time with his or her friends	◻	◻	◻	◻
I come home late	◻	◻	◻	◻
My partner comes home late	◻	◻	◻	◻
My cleaning, housework or cooking	◻	◻	◻	◻
My partner's cleaning, housework or cooking	◻	◻	◻	◻
I wanted to have sex but my partner did not	◻	◻	◻	◻
CONTINUE TO THE NEXT PAGE				

	Never	**Some-times**	**Often (every month)**	**Very often (every week)**
My partner wanted to have sex but I did not	◻	◻	◻	◻
Money I spend	◻	◻	◻	◻
Money my partner spends	◻	◻	◻	◻

Appendix C

PADS+ Partner-Specific Friction Sensitivity Scale

Instructions read aloud by the researcher:

These questions are about how angry you would get if a partner said or did certain things.

By partner we mean someone who is more than just a friend and who you were or have been in a romantic and/or sexual relationship with for some time.

Instructions written at the beginning of the scale:

How angry would you be if…

	Not at all angry	**A little angry**	**Angry**	**Very angry**
My partner doesn't agree with me	☐	☐	☐	☐
My partner lies to me	☐	☐	☐	☐
My partner makes fun of me (e.g., because of how I look)	☐	☐	☐	☐
My partner leaves me out (e.g., does not invite me to something)	☐	☐	☐	☐
My partner treats me like I'm stupid	☐	☐	☐	☐
My partner ignores me	☐	☐	☐	☐
My partner lets me down (e.g. doesn't do something that they say they will)	☐	☐	☐	☐
My partner tells me what to do	☐	☐	☐	☐

Appendix D

PADS+ Partner Cohesion Scale

(Adapted from the social cohesion scale described by Sampson et al. 1997)

Instructions read aloud by the researcher:

Now we would like to ask some questions about any partners you currently have or that you may have had last year.

Please only answer about partners you had between January 2014 and now.

By partner we mean someone who is more than just a friend and who you were or have been in a romantic and/or sexual relationship with for some time.

My partner and I always help each other out if needed

- □ Strongly agree
- □ Agree
- □ Disagree
- □ Strongly disagree

My partner and I respect and get along well with each other

- □ Strongly agree
- □ Agree
- □ Disagree
- □ Strongly disagree

My partner and I trust each other

- □ Strongly agree
- □ Agree
- □ Disagree
- □ Strongly disagree

My partner and I often argue and fight

- □ Strongly agree
- □ Agree
- □ Disagree
- □ Strongly disagree

My partner and I share the same values (think alike) about important things

- □ Strongly agree
- □ Agree
- □ Disagree
- □ Strongly disagree

Appendix E

PADS+ IPV-Specific Moral Rules

Instructions read aloud by the researcher:

The next section is about what things you think are right or wrong for a person your age to do. For each question please answer how wrong or not wrong you think each thing is. Make sure you read the questions carefully.

Instructions written at the beginning of the scale:

We would now like to ask you about a number of things that a person your age might get up to. We would like you to tell us how serious you think it is for someone of your age to do the following:

Do you think it is very wrong, wrong, a little wrong or not wrong at all to…

	Very wrong	**Wrong**	**A little wrong**	**Not wrong at all**
Hit a partner for flirting with someone else	☐	☐	☐	☐
Hit a partner who said something that annoyed you (e.g. told you a lie, insulted you)	☐	☐	☐	☐
Hit a partner who has been unfaithful	☐	☐	☐	☐

Appendix F

PADS+ IPV-Specific Moral Emotions

Shame

Instructions read aloud by the researcher:

Next you should answer about whether you would feel shame in front of your friends, boss, teachers or parents, if you were caught committing a crime. By shame we mean whether you would feel embarrassed in front of others about what you had done.

Instructions written at the beginning of the scale:

Would you feel ashamed if…

You **hit your partner for lying to you** and your…			
	No, not at all	**Yes, a little**	**Yes, very much**
Best friends found out about it	☐	☐	☐
Boss or teachers/tutors found out about it	☐	☐	☐
Parents found out about it	☐	☐	☐

Guilt

Instructions read aloud by the researcher:

The next questions are about whether you would feel guilty if you misbehaved or committed a crime. By guilty we mean would you feel bad about yourself and what you had done.

Instructions written at the beginning of the scale:

Would you feel guilty if…

	No, not at all	**Yes, a little**	**Yes, very much**
You hit your partner for lying to you?	□	□	□