

APPROVAL OF IPV, AND EXPERENCIES OF VIOLENCE AND CONTROL

Investigating the Relationship between Approval, and Experiences of Physical Violence and
Controlling Behaviours in Heterosexual Intimate Relationships

By

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A thesis

Submitted to the Victoria University of Wellington

In fulfilment of the requirements for the degree of

Master of Science in Forensic Psychology

Victoria University of Wellington

2018

Abstract

Popular theory understands intimate partner violence (IPV) as gendered, and stresses the integral role of a patriarchal society and approval of male to female aggression in the aetiology of men's IPV to women. This thesis set out to explore this hypothesis using a gender inclusive methodology, and examines the relationship between participants' approval of men's and women's use of controlling behaviours and physical violence in heterosexual intimate relationships. Undergraduate university students (N = 515) completed an online questionnaire about their use and experience of aggression and controlling behaviours, and their beliefs about dating violence. Bivariate analyses found that conflict tactics and controlling behaviours were perpetrated and experienced at equal rates by the sexes. ANOVA found that male and female participants approved of female to male violence significantly more than male to female violence when the aggressor was provoked via infidelity or physical violence, indicating a collective chivalrous belief pattern. Violent students also approved of male and female violence significantly more than non-violent students. Applying Johnson's (1999) typological approach, latent profile analysis found that 77.7% of violent relationships could be classed as Situational Couple Violence (SCV), 10.4% as Coercive Controlling Violence (CCV), 2.1% as Violent Resistant (VR), and 9.8% as Mutual Violent Control (MVC). Bivariate analysis revealed a greater frequency of women than men in the SCV group (n = 92, 61%) with a small effect; no other significant differences were found between the groups. ANOVA also found that the typology groups approved of female to male violence significantly more than male to female violence with CCV men endorsing the highest approval of male *and* female violence. Further research is required to determine why this group hold high approval in general compared to other groups. The need for interventions to address the approval of a person's own violence and approval of their partner's violence is discussed in addition to implications for theory, practice, and policy.

Acknowledgements

I would like to thank Dr Louise Dixon for supervising this thesis. Thank you for your guidance and encouragement, and for helping me to discover a topic that I am passionate about. You have helped me to grow as a researcher, and as a person. It has been a pleasure to work with such a wonderful supervisor.

Thank you to Laina Isler for your statistical advice and expertise. It was of immense help in allowing me to complete this thesis.

Thank you to everyone in the forensic psychology lab for your support and advice, and for keeping me on track to achieve my goals. Your feedback and knowledge on everything from statistical analyses to formatting was tremendously valuable.

Thank you to all of the friends that I have made during my time at Victoria University. I could not have asked for a more compassionate and supportive group to have spent the past two years with. I will always be grateful for your friendship, and I am fortunate to have had the opportunity to know all of you.

A special thank you to Saara and Shameela. Thank you for your constant assistance, encouragement, and positivity. I am eternally appreciative of the both of you. The two of you are what kept me motivated to continue, even when I felt stressed and overwhelmed. I could not have done this without you.

Finally, thank you to my parents, Murray and Sharon, for your love and support. You have always encouraged me to follow my dreams, and to achieve to the best of my abilities.

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Introduction

Intimate partner violence (IPV) is recognised as a worldwide public health issue (Krug, Dahlberg, Mercy, Zwi, & Lozano, 2002) and has been the focus of a plethora of research since the 1970's. Much research since that time has focused on understanding men's violence to women (Dobash & Dobash, 1984). Indeed, the World Health Organisation's Multi-Country Study on Women's Health and Domestic Violence Against Women shows this to be a problem (Garcia-Moreno, Jansen, Ellsberg, Heise, & Watts, 2006) with high international lifetime prevalence rates of physical IPV ranging from 13% in a Japanese city, 27% in a Brazilian city, and 61% in a Peruvian province. However, early surveys with nationally representative community samples in the United States set out to address the problem of surveys using select samples of women. These surveys examined the perpetration and victimisation of both partners in a heterosexual relationship and concluded that an understanding of IPV needed to be inclusive of both genders. The National Family Violence Surveys, conducted in 1975 and 1985 (Straus & Gelles, 1986), showed that approximately 12% of men and women perpetrated IPV - in other words men and women were shown to perpetrate violence at equal rates. Research has consistently shown that IPV affects a large number of people across age, gender, ethnicity, and sexual orientation (Archer, 2000, 2006; Walter, Chen, & Brieding, 2013). Within New Zealand, the most recent Crime and Safety Survey (NZCASS) found that younger age groups experienced the highest rates of IPV with 13.8% of 15-19 year olds and 12.9% of 20-29 year olds experiencing one or more violent offences from an intimate partner compared to 4.8% of 30-39 year olds (Ministry of Justice, 2015). Furthermore, the NZCASS showed that both men and women experience high rates of IPV, with 4.4% of men and 5.7% of women experiencing physical victimisation, and 17% of men and 14.4% of women experiencing controlling behaviours in the previous 12 months (Ministry of Justice, 2015).

Considering the wide range of people affected by IPV, it is important to understand how and why men and women experience it so that appropriate responses can be put in place to prevent, and respond to, the social problem. Despite statistics that have consistently highlighted men's experiences of IPV, the majority of research and practice knowledge has been generated with female victims of male IPV (Dixon & Graham-Kevan, 2011). This thesis will aim to address this gender gap and provide a gender inclusive examination of IPV. As such, it adopts a broad definition of IPV: "any form of [physical, sexual and psychological] aggression and/or controlling behaviours used against a current or past intimate partner of any gender or relationship status" (Dixon & Graham-Kevan, 2011, p. 1145).

Theoretical Understanding of IPV

How IPV is defined effects how it is theoretically conceptualised, which in turn influences the methodology used to study the phenomenon. This in turn effects how researchers understand the nature of IPV (Esquivel-Santoveña & Dixon, 2012). It is therefore important that theories about the causes of IPV are tested against the scientific evidence and refined in accordance with the data to prevent this self-fulfilling prophecy. Differences between theoretical conceptualisations stem from two viewpoints about the nature of the social problem: that IPV can be understood as violence against women, or that IPV is a gender inclusive problem that effects both men and women at roughly equal rates. The main difference in the theoretical rationale of the two perspectives, unsurprisingly then, revolves around the role of sexism in society as providing the sole explanation for IPV.

The gendered theory. The gendered theory has arguably had the most influence in shaping the understanding of IPV (Dobash & Dobash, 1984, 2004; Yllo, 1983). The theory proposes that IPV is caused by patriarchal societal beliefs, which encourage men to be dominant over women and that violence is used as one means of achieving this (Dixon & Graham-Kevan, 2011). As such, IPV is widely conceptualised as violence to women that

occurs in the context of male perceived entitlement and institutionalised power discrepancies (Dobash, Dobash, Wilson, & Daly, 1992). Men who aggress against their female partners are considered to have internalised patriarchal values, leading them to have a desire to control their partners by any means necessary. Gendered theory posits that men's IPV is often perpetrated within a "constellation of abuse" (Dobash & Dobash, 2004, p. 328) that involves a variety of control tactics that were first described within the Power and Control Wheel established during the Domestic Abuse Intervention Project conducted in Duluth, Minnesota (Pence & Paymar, 1986). The Power and Control Wheel includes the tactics of intimidation, emotional abuse, isolation, minimising/denying/blaming, involving children, using male privilege, economic abuse, and coercion/threats (Pence & Paymar, 1986). Physical and sexual violence are outside of the wheel because it is assumed that these forms of abuse are always used in the context of power and controlling behaviours. Dobash and Dobash (1984) argue that physically and sexually violent episodes should be viewed as intentionally planned by the aggressor, within the context of control and the intention to control his female partner via any means necessary. From this perspective, violence is only used under the context of control.

When women aggress against their partners, their violence is rationalised in terms of self-defence or retaliation (Dobash et al., 1992). Dobash and Dobash (1984, 2004), and Dobash et al. (1992) argue that it is only by examining the wider context of the relationship that one can establish what is happening. For example, when considering female perpetration, gendered theorists have argued that both sociocultural and relationship factors in which men hold power due to a patriarchal society should be considered (Hines & Douglas, 2010). As IPV is therefore considered to be concerned primarily with men's violence to women, most organisations that are related to IPV are designed to help female victims (Dobash & Dobash, 2004).

Empirical evidence examining gendered theory. Support for the gendered theory has largely come from descriptive, correlational research examining male perpetration, and victimisation experiences of women (Bell & Naugle, 2008). For example, Dobash and Dobash (1984) conducted interviews with 109 battered women living in refuges. Both qualitative and quantitative data was collected concerning the women's experiences of violence. The authors found that two thirds of physical altercations occurred following some form of argument; furthermore, a broad range of violent acts were experienced with the most common type being punching face/body (45%; Dobash & Dobash, 1984). While studies such as this highlight the extent of the violence that women can experience, there is a bias associated with samples from women's refuge shelters in which data on both partners is obtained solely from the woman. This bias can be an issue as self-reports tend to be lower than partner reports, which inflate the effect size in the male direction (Archer, 2000).

The National Violence Against Women Survey (NVAWS) is a key study that is consistently used to support the gendered theory. The NVAWS was a nationally representative survey conducted in the United States between November 1995 and May 1996 (Tjaden & Thoennes, 1998). Roughly 8000 men and 8000 women were interviewed in an attempt to provide a context for women's and men's experiences of victimisation. Responses to the NVAWS showed that 25% of surveyed women and 8% of surveyed men had experienced rape and/or physical assault by an intimate partner at some point in their life, while 1.5% of women and 0.9% of men had experienced these behaviours within the previous 12 months (Tjaden & Thoennes, 1998). Moreover, women were found to be seven to 14 times more likely to report experiencing severe physical violence (e.g., choked, beaten up, had weapon used against them). These results demonstrated that women were significantly more likely to be victimised by intimate partners than men, and that violence against women was therefore the primary form of IPV (Tjaden & Thoennes, 1998). The

findings of the NVAWS contradict the equal rates of male and female IPV found by the NFVS, however, criticisms of the validity of the NVAWS have been raised. It asks men and women about their victimisation in the context of a 'violence against women' survey. This is because it was set up as a survey to examine violence against women; men's experiences were added into the project some months after the study began in order to provide a comparison group (Dixon & Graham-Kevan, 2011). Including men's experiences as an afterthought in a survey, rather than as something that drives the design of the survey, is arguably flawed and will produce biased results toward female victimisation experiences.

Gendered theory argues that it is a mistake to assume that a violent act by a woman (i.e., a slap or a punch) is equivalent to the same violent act carried out by a male (Dobash et al., 1992). This is because there is a sex difference in injury potential, but also because men and women differ in how much control they have over a situation (Dobash et al., 1992). It is further argued that statistics, which show women's violence is as common as men's violence, should not be viewed as evidence for equal rates of victimisation (i.e., a husband being physically attacked by his wife is not a victim because the husband is physically stronger; Yllo, 1983). However, the difference between an act of aggression and the resultant injury have been distinguished in research methodology (Straus & Gelles, 1986). While there are differences in injury rates for the sexes (Archer, 2000), it is argued the focus should be on prevention of the aggressive act within the family, not the outcome of that act (Dixon & Graham-Kevan, 2011). For example, children living with partner violence where both partners are aggressive are three times more likely to experience physical abuse than children who live with only one violent caregiver (Smith Slep & O'Leary, 2005). This is one reason why the importance of understanding and preventing aggressive behaviour in relationships, regardless of the level of harm they can inflict in comparison to each other, is paramount in family violence research (Dixon & Smith Slep, 2017).

The gendered theory has therefore received extensive criticism for not being based on sound research findings, but rather being ideologically driven (Esquivel-Santoveña & Dixon, 2012). Felson (2010) argues that men and women can have a variety of motivations for committing IPV and that control does not have to be involved. Indeed, many researchers have found gender symmetry in terms of control motives (i.e., men are no more controlling than women; Graham-Kevan & Archer, 2003b, 2005). Furthermore, LaRoche (2008), using the 2004 General Social Survey on Criminal Victimization (GSS) Canadian survey, showed that of those people who could be classified as experiencing physical violence and control from their intimate partner, approximately 40% were men. Therefore, other explanations have been put forward to account for IPV.

The role of sexism in IPV. Considering the gendered theory posits that patriarchal society provides the milieu for IPV to take place, it follows that sexism, couched as hostility toward women, would play a role in the aetiology of IPV. However, Felson (2000) provides an alternative explanation for how sexism may explain the equal rates of IPV seen between the sexes, rather than explain men's violence against women alone.

In comparison to the norm of patriarchy, it has been argued that chivalry is the norm of Western societies, which discourages men from harming women and promotes the protection of women instead (Felson, 2000, 2010). Chivalrous norms would be a result of sexism being expressed as benevolent rather than hostile (Glick & Fiske, 1996). Benevolent sexism can be described as a set of attitudes that are sexist due to viewing women stereotypically as weaker, but creates arguably positive behaviours (i.e., offering additional assistance to women; Glick & Fiske, 1996). An example of a benevolent view is that women should be admired as wives or mothers, idealised as romantic objects, and protected (Glick & Fiske, 1996). Hostile sexism is defined as an antagonistic attitude towards women, who are perceived as violating traditional gender roles, challenging male dominance or seeking to

control men (Glick, Sakallı-Ugurlu, Ferreira, & de Souza, 2002; Yamawaki, Ostenson, & Brown, 2009). An example of a hostile view is that women are sexual teases who use their sexuality to gain power/control over men in intimate relationships (Glick & Fiske, 1996). Whilst hostile and benevolent sexism are highly correlated, the more acceptable version of sexism will be displayed in a given society (Glick & Fiske, 1996). Therefore, in Western society, women are arguably seen as physically weaker and needing protection from men, rather than society owning openly hostile views to women. In a benevolently sexist society, a man would violate the norm by aggressing against a woman, which would lead to condemnation of the man rather than support for violence against women. To the contrary, women's violence to men would be seen as trivial and inconsequential, and there would therefore be greater approval for female to male violence (Felson, 2010). In accordance with this argument, research has found that women justify their aggression with the belief that men can protect themselves (Fiebert & Gonzalez, 1997) and express low fear about the possibility that the man will retaliate (Archer, 2000).

Indeed, this theory about the role of sexism in IPV could explain why rates of violence in the IPV domain are equal, unlike any other area of violent crime where men are the predominant aggressors (Campbell & Manganello, 2006). Archer (2000) argues that in Western societies a norm of prohibiting men from physically aggressing against women prevails and enables women to act aggressively without fear of consequences. Thus, he concludes that the results of studies highlighting the importance of patriarchy are diminished in modern Western samples due to the norm of chivalry. Rather, in Western societies, the pattern of physical violence will be influenced more heavily by individual or relationship factors than by patriarchy (Archer, 2000). It can therefore be predicted that chivalry (benevolent sexism) causes disapproval of male to female IPV, rather than approval as the gendered theory predicts. This study sets out to test if approval of female to male violence

exists in a Western sample. Future research can then explain the role of sexism in driving such gendered behaviours.

The gender inclusive theory. The gender inclusive theory has been proposed as an alternative to the gendered theory of IPV. The gender inclusive theory can be considered an umbrella term that accounts for a number of individual theories which explain IPV by men and women such as power theory (Coleman & Straus, 1986), social learning theory (Bandura, 1978), and personality/typology theories (Holtzworth-Munroe, Meehan, Stuart, Herron, & Rehman, 2000; Holtzworth-Munroe & Stuart, 1994; Johnson, 2008). This perspective can account for the research that finds that men and women can be perpetrators and victims of IPV at approximately equal rates (Archer, 2000; Straus & Gelles, 1986).

Empirical evidence examining the gender inclusive theory. Archer (2000) conducted a meta-analysis of 82 studies which aimed to provide a starting point to reconcile the conflicting data concerning the nature of IPV. In terms of the studies used for the meta-analysis, the majority took place in the United States during the 1980's and 1990's with half involving college or high school students. Archer (2000) denotes a difference between aggression and violence: aggression is used for measures that are act based while violence refers to measures concerned with injuries. This distinction avoids the idea that all physical aggression has damaging consequences. Archer (2000) found that when measures were act based, women were more likely than men to use physical aggression and to use it more frequently, although the effect size was very small ($d = -.05$). When measures were based on injuries, men were more likely than females to have injured their partners ($d = .15$). Since the injury effect size was small, Archer (2000) qualifies this point saying that the majority of those injured were women (62%) but highlights that a substantial number of men were also injured by their female partner (38%). Thus, female violence towards males can be severe enough to cause injury, which contradicts the gendered theory's claim that female instigated

violence is negligible. The meta-analysis by Archer (2000) also provides aggregate support for the findings of the NFVS.

Moving on to test the role of patriarchy as an explanation of IPV in different countries, Archer (2006) tested data from 52 nations. He assessed whether cultural differences of IPV could be explained in terms of the position of women in their societies (status/power in society), and whether female to male violence occurred in societies in which women had low status. Analyses found that countries with a high level of gender empowerment (high social power for women) had roughly equal rates of male and female violence, while countries with low gender empowerment (low social power for women) had high rates of female victimisation. These types of results suggest that patriarchal norms can promote and endorse male physical violence against women, but only in countries where that norm is accepted (Esquivel-Santoveña & Dixon, 2012). This further reinforces that in Westernised countries at least, patriarchy should be viewed as one potential factor amongst many that could influence IPV perpetration (Graham-Kevan & Archer, 2005).

A multifactorial model of IPV. Dutton (2006) proposed a nested ecological model as a framework for considering multiple factors that are associated with the occurrence of IPV. Within this model, there are five levels that interact (Dutton, 2006). The first is the macrosystem which encompasses broad cultural values/beliefs (e.g., patriarchy/chivalry, socioeconomic power for each sex). Second is the exosystem which describes the structure of society and groups that can influence the immediate situation (e.g., peer influence, religion, community groups). Third is the microsystem which in the case of IPV is the family structure or the immediate family dynamic (e.g., distribution of power in the relationship, communication patterns, couple conflict patterns). The fourth level is the ontogenetic level which describes individual developmental experiences that can shape responses to microsystem and exosystem stressors (e.g., past experience of violence in the family, how

relationship conflict has been resolved in the past). Finally, Dutton added a fifth level called the suprasystem. This is argued to be a deeper level than the macrosystem, and describes how social disparities in power generate conflict/violence regardless of which group holds power. Thus, it is the act of holding absolute power over another group that leads people to act abusively (Dutton, 2006). The suprasystem would assume that males and females would be violent if they had total control over their partner regardless of other variables. Describing IPV risk factors in terms of these levels does not create any theoretical predictions or explanations for IPV, but it does provide a framework to guide specific theorising (O'Leary, Smith Slep, & O'Leary, 2007).

Testing a multivariate nested ecological framework. Stith, Smith, Penn, Ward, and Tritt (2004) conducted a meta-analysis using 85 studies with the purpose of identifying IPV risk factors that are most strongly related to perpetration and victimisation. For this meta-analysis the authors examined the exosystem, microsystem, and ontogenetic level of Dutton's nested ecological model for offender and victim risk factors. For male offenders the strongest microsystem risk factors were: emotionally abusing a partner, and forcing a partner to have sex; and the strongest ontogenetic risk factors were illicit drug use, and having attitudes condoning violence. For female offenders the microsystem risk factor of marital satisfaction had a moderate composite effect size; the strongest microsystem risk factor was using violence against their male partner; and the strongest ontogenetic risk factors were depression, and fear of their partner's violence. The authors concluded that the large number of risk factors identified lent support to a complex multivariate conceptualisation of IPV, arguing that the effect sizes found across all of the risk factors make it unreasonable to assume that any one variable would account for the large amount of variance in IPV perpetration and victimisation (Stith et al., 2004).

O'Leary et al. (2007) created and tested a multivariate model of male and female IPV using a community representative sample of 453 couples. The main variables that produced strong paths for IPV perpetration were dominance/jealousy, power imbalance within the relationship, and marital adjustment. It is important to note that these variables provided strong direct paths in the models for both males and females. As well as these factors, some differences were found. For example, a history of aggressive behaviour as an adolescent provided a direct pathway to IPV for female perpetrators only, while expression of anger predicted male violence only. The authors concluded from these results that integrating factors from different models/theories is "possible and necessary if one is to maximise predictive power" of IPV models (O'Leary et al., 2007, p. 761). Furthermore, it is interesting that some factors consistently shown in previous research to be risk factors (e.g., attitudes approving of violence) were not retained in either of the models. This does not necessarily mean that these variables are unimportant, but it could be that they do not contribute anything unique when examined with all of the other variables (O'Leary et al., 2007).

In sum, evidence demonstrates the need to understand the interaction of a range of risk markers in order to produce explanations for the complex aetiology of IPV. It is clear that the aetiology of IPV is unlikely to be reduced to one risk marker of patriarchal beliefs.

Normative Beliefs

One explanation that can be included in a multifactorial explanation of IPV is the cognition of the perpetrator. Within the aggression literature, Huesmann and Guerra (1997) examined the role of what they call normative beliefs in the process of enacting aggressive behaviour. Normative beliefs are referred to as the cognitions an individual has about how acceptable a particular behaviour is (Huesmann & Guerra, 1997). These normative beliefs can be general or specific. For example, a general normative belief may promote aggression in general, while a specific normative belief may promote aggression only in certain

situations, for example if you are aggressed against first (i.e., retaliation). Huesmann and Guerra (1997) believe that there should be some overlap between an individual's normative beliefs and the beliefs of society or a relevant social group that an individual is a part of (social norms), however, this does not have to be the case. As such, it is possible for an individual to have a normative belief that is different from, or contradicts the prevailing norm of society (Ireland, 2009). For the purpose of this study, Huesmann and Guerra's (1997) definition of normative beliefs will be used.

Huesmann (1988) developed a social information-processing model of aggressive behaviour. From this perspective, Huesmann (1998) argued that aggressive behaviour, like all behaviour, is mediated by cognitions and cognitive processes of which normative beliefs are included. This does not mean that normative beliefs cause behaviour, but are one factor that influence behaviours. Research has demonstrated that habitual aggression can emerge in early life, and is normally the product of multiple factors (Huesmann, 1998). While other factors are important, an individual's normative beliefs are hypothesised by Huesmann (1988) to be a cognitive schema that has a central role in regulating aggression. This is because normative beliefs can prime behaviour evaluation schema, direct the activation of social scripts, and remove inappropriate scripts/behaviours from consideration. In other words, normative beliefs act as filters which help the person to evaluate if the behaviour is acceptable, possible to enact, and will or will not have desirable outcomes. Therefore, normative beliefs effect the likelihood of a behaviour occurring. Additionally, different normative beliefs can be activated within the same individual within different contexts depending on a variety of factors including mood, social or environmental cues, and arousal level (Huesmann, 1998). A crucial point to note is that it is not only society's collective norms and responses to aggressive behaviour that are important, but also how the aggressive individual interprets society's response (Huesmann, 1998).

Research by Huesmann and colleagues has consistently demonstrated with longitudinal studies that individuals who are aggressive (both children and adults) have normative beliefs endorsing aggression (e.g., Huesmann & Guerra, 1997). During earlier life (e.g., six to seven years old) normative beliefs are unstable and thus can fluctuate. By age ten, however, normative beliefs become more stable, and can be used to predict future aggressive behaviour (Huesmann, 1998; Huesmann & Guerra, 1997). Thus, normative beliefs can be shown to “crystalize” over time and become resistant to change (Huesmann & Guerra, 1997, p. 417). Additionally, both normative beliefs that promote aggression and actual enactment of aggressive behaviours increase with age (Huesmann & Guerra, 1997). In terms of IPV, the work by Huesmann (1988, 1998), and Huesmann and Guerra (1997) would suggest that people who believe that violence is acceptable in intimate relationships are more likely to enact IPV. As previously mentioned, the two main societal beliefs that are presented in the literature as factors that influence a person’s normative beliefs about IPV, are patriarchal and chivalrous beliefs. The former would assume that people endorsing patriarchal beliefs think violence to women by men is acceptable, the latter that men’s violence to women is unacceptable.

Measuring normative beliefs about approval of IPV. Sorenson and Taylor (2005) examined norms concerning the acceptability of partner violence. They presented five vignettes in which characteristics of the victim, assailant, and incident were manipulated to a randomly selected community sample of 3,769 adults. The authors found that participants responded more consistently to vignettes when the aggressor was male. Due to this, they were able to demonstrate that male to female aggression is viewed more negatively than female to male aggression, and that male victims are attributed more responsibility for the violence than female victims. Furthermore, participants considered male perpetrated physical or sexual violence to be more serious than female violence, and considered people who

experienced physical violence as in more need of intervention than those who experienced emotional abuse. Additionally, participants were more likely to consider the aggressors' behaviour as illegal when threats were used regardless of the aggressor's gender (Sorenson & Taylor, 2005). Due to these results, Sorenson and Taylor (2005) proposed that male to female violence norms are clearer and easier to understand than female to male violence norms, as conventions about men's violence to women are better documented than those reflecting women's violence to men. The results found by Sorenson and Taylor (2005) support the notion that situational factors for female violence are considered to a greater extent when making social judgements, however, the authors acknowledge that these findings may relate more to societal expectation and men/women's beliefs than they do to violence itself.

Hammock, Richardson, Lamm, Taylor, and Verlaque (2017) aimed to examine the role of the gender of the aggressor, the gender of the victim, and the type of aggression on the perception of the perpetrator, the victim and the situation. Vignettes describing an intimate couple in an aggressive situation were given to 251 university students, and varied depending on the type of aggression displayed, the gender of the perpetrator, and the gender of the victim. The study found that male perpetrators were perceived more negatively (more capable of inflicting injury) than female perpetrators regardless of the victim's gender (Hammock et al., 2017). Furthermore, the vignettes with female victims produced more negative perceptions of the situation, and of the perpetrator regardless of the perpetrator's gender. The effect of participant gender indicated that male participants evaluated victims more negatively than female participants, and that female participants perceived perpetrators more negatively than male participants (Hammock et al., 2017). The authors concluded that people's perceptions of violence between members of a couple are affected by the gender of both the perpetrator and victim which leads to different interpretations of the same aggressive

behaviours depending on whether a male or female is perpetrating or receiving the behaviour (Hammock et al., 2017).

The current study sets out to test the direction of the group norm regarding approval of heterosexual violence in a Western sample, and the extent to which individuals within that sample who are aggressive endorse the group norm, or not.

A Typology of Couples

Despite evidence for the multifactorial nature of IPV, much debate has continued regarding which theoretical perspective should guide practice and service provision. Michael Johnson attempted to bridge the gap between the gendered and gender inclusive perspectives. Using physical violence and controlling behaviours as the focus, Johnson (1995) argued that IPV could be separated into two primary groups: coercive controlling violence (CCV) and situational couple violence (SCV). The labels used to refer to these groups have changed throughout the development of the typology (Kelly & Johnson, 2008); for the sake of simplicity, CCV and SCV will be used here.

Johnson (1995) proposed that CCV is characterised by a systematic pattern of power and control, emotional abuse, and coercion with the addition of physical violence. He argued that CCV constituted severe physical violence that occurred frequently, and that escalated over time. Furthermore, CCV is considered to be instrumental in nature (i.e., people use violence to achieve a goal like maintaining power/control of the relationship; Kimmel, 2002). This type of violence was argued to be due to patriarchal values (Johnson, 1995) but this focus has been removed in later reviews to better convey the idea of emergent literature that not all abusive/controlling relationships were a result of patriarchal beliefs (Johnson, 1999). Despite this, Johnson (2005, 2008) maintained that CCV was perpetrated almost exclusively by men. Comparatively, SCV is conceptualised as violence enacted as a response to ordinary, and occasional conflicts that can arise within relationships (Johnson, 1995). SCV could occur

if a relationship conflict escalates to a point where one partner physically lashes out. The key point is that any violence that does occur lacks the desire or motivation to control the other partner; it is more of a manner of communication, or expressing emotions (Archer & Graham-Kevan, 2003). Additionally, research has demonstrated that men and women initiate violent incidents as often as each other, and that there are a limited number of cases where escalation of violence occurred (Johnson, 1995). This does not mean that SCV is a less serious form of violence as it can be dangerous and injurious (Kelly & Johnson, 2008).

Johnson (1999) reworked his conceptualisation of IPV to include two additional groups: violent resistant and mutual violent control. Violent resistant (VR) behaviour is characterised by violence that is not controlling, and is used in response to a partner who is violent and controlling (Johnson, 1999). Therefore, VR can be used in self-defence or as a means of preventing further violence, however, VR does not necessarily constitute self-defence, and should be viewed as a different construct. This is because self-defence is a legal term with particular meanings, and VR has little to do with these legal definitions of self-defence (Johnson, 2008). VR behaviour may lead to an escalation of violence as the resistor's use of violence may encourage the violent and controlling partner to use more violence to quell the resistance (Johnson, 2008; Kelly & Johnson, 2008). Finally, mutual violent control (MVC) is a rare type of violence postulated to occur when both partners in a relationship use violence and are controlling. In effect, both partners are trying to control the other (Johnson, 1999). Johnson (2008) does argue that MVC is a different type of violence that should be distinguished from relationships involving CCV with VR or SCV relationships where both partners are violent. Due to the rarity of MVC relationships, however, research is scarce, but it is argued that mutual combat does seem to occur (Johnson, 2008).

Johnson (1995) proposed that the gendered and gender inclusive theories were each attempting to explain a different type of IPV. He suggested the core reason for this was that

the gendered perspective drew on shelter samples in which male CCV and female passivity of resistance to this violence (i.e., violent resistant, VR) predominate. The gender inclusive perspective, on the other hand, drew on general population samples where SVC is far more common. As a result, Johnson (2008) argued that the gendered and gender inclusive theories were both examining one type of IPV with the assumption that IPV constituted one single type. He maintained that because of this, researchers from either perspective were not open to the possibility that they were only seeing one aspect of the problem (Johnson, 2008).

Consequently, Johnson (2008) concluded that gender was not a factor for SCV but that it was a strong factor related to CCV and VR. He acknowledged that CCV occurs in same-sex relationships and can be perpetrated by women, however, since CCV is dominated by male perpetrators and that there is little research on other perpetrators of CCV, male perpetration is the focus (Johnson, 2008).

Nevertheless, criticism of Johnson's typology has been raised, largely due to sampling effects. Graham-Kevan (2007) argued that the sample Johnson used included known female victims drawn from crime surveys of female victimisation and violence against women surveys. As such, the sample was inherently going to contain highly victimised women but was unlikely to contain highly victimised men. Using the data gathered by the 2004 General Social Survey on Criminal Victimization in Canada (GSS), LaRoche (2008) examined the pattern of IPV. The results of LaRoche's (2008) analyses did not support Johnson's finding that CCV was predominantly perpetrated by men, rather LaRoche demonstrated that approximately 40% of the victims of CCV were male. Additionally, the results of the GSS do not support Johnson's claim that general population samples are unable to measure CCV. While the GSS data indicates that there are different types of IPV, it does not support that notion that these types are experienced very differently by the genders, or that CCV is

predominantly found in clinical samples. Rather, the GSS data supports the gender inclusive theory (LaRoche, 2008).

Despite an abundance of international literature concerning Johnson's (1999) typology, research examining it in a New Zealand context is limited. For example, population based research arising from the Dunedin Multidisciplinary Health and Development study found that males ($n = 37$) and females ($n = 38$) engaged in similar behaviours to CCV (Ehrensaft, Moffitt, & Caspi, 2004) although Johnson's typology was not explored. More recently, Gulliver and Fanslow (2015) explored a variation of the typology using data from a general sample of women collected as part of a New Zealand replication of the World Health Organization's Violence against Women survey. Whilst considered a replication of Johnson's typology by Gulliver and Fanslow (2015), the measure of control used in the study was confounded by including elements of psychological and emotional IPV. Due to this, the authors removed the variable of control from their models and thus, they categorised their sample into three groups based on experiences of violence: (a) those experiencing no or low amounts of IPV, (b) those experiencing infrequent IPV with moderate severity, and (c) those experiencing multiple types of IPV with high severity. Gulliver and Fanslow (2015) concluded that their groups were not similar to SCV or VR, but that their third group *could* be similar to CCV. However, it is uncertain how accurate their conclusions are, given the absence of control as a grouping variable.

Since typological research in a New Zealand context is limited, this study aims to explore the utility of Johnson's (1999) couple typology in this setting. Furthermore, as little research has explored the relationship of the typology with other risk markers found at different levels of the ecological model, this study also aims to explore differences in the approval of IPV between the types in comparison to non-violent individuals.

Study Objectives

In sum, this study provides a test of the gendered theory of IPV. It seeks to examine the approval ratings of violence between the sexes in a New Zealand student sample, and the relationship of this approval with perpetration of controlling behaviours and physical violence in intimate relationships. Specifically, it will explore the following research questions:

1. What is the nature and prevalence of different conflict tactics used within the sample during relationship conflict within the past twelve months?
2. What is the dominant normative belief of the sample concerning the approval of any physical IPV perpetrated by the different sexes under different levels of provocation?
3. Do women and men who have used violence in a relationship during the past twelve months differ in their approval ratings compared to non-violent individuals?
4. A). To what extent can we classify the current sample using Johnson's typology?
B). Is there a relationship between the strength of the dominant normative belief and Johnson's typology?

Method

Participants

Participants were 775 male and female undergraduate psychology students at Victoria University of Wellington. The inclusion criteria required participants to be at least 17 years old, to have been in a heterosexual dating relationship for at least one month at some point in their life, and to live by Western values. Ten participants did not provide complete responses, and with an additional five participants, data did not record correctly. Those participants who did not identify as male or female ($n = 2$), those who did not live by Western values ($n = 57$), those who were not in heterosexual relationships ($n = 74$), and those who had not been in a relationship during the past 12 months ($n = 80$) were removed from the dataset. Furthermore, those participants who incorrectly answered one or more attention checks ($n = 32$) were removed due to concern about the reliability of their responses. This resulted in a final N of 515 for analysis (299 females, 216 males). The mean age of the sample was 19.0 years ($SD = 3.0$). Sixty-three percent of participants identified as New Zealand European ($n = 491$), ten percent as Māori ($n = 79$), six percent as Pacific Island peoples ($n = 44$), eight percent as Asian ($n = 58$), four percent as European ($n = 33$), three percent as other ($n = 19$), and less than one percent did not record an ethnicity ($n = 5$). An additional six percent of participants identified with more than one ethnic group ($n = 46$).

Procedure

The study was advertised through the cloud-based software Sona-Systems, which is linked to Victoria University of Wellington's Introduction to Psychology Research Programme (IPRP). Data collection occurred at two time points: March-June 2016, and March-June 2017. The order of the measures was counterbalanced for order effects. Participants were provided with an information and consent sheet that explained the study, were assured that their participation was voluntary and anonymous, and that withdrawal from

the study was possible by not submitting their responses. The consent sheet also contained contact information for free support services for people wishing to discuss issues surrounding relationship violence (Appendix A). Confidentiality was assured as identifying information was not available to the researchers. Participants were then directed via web link to the questionnaire, created and hosted on Qualtrics, an online survey software. Participants were asked to complete the questionnaire in reference to a past or current heterosexual relationship within the past 12 months that had lasted for at least one month. If participants had had multiple relationships within the 12-month period, they were encouraged to choose the relationship they could most accurately describe.

The questionnaire took approximately 45-60 minutes. Participants were asked to complete the questionnaire in a private, quiet setting, and to complete it in a single sitting. Furthermore, participants were required to provide an answer to each question before proceeding to the next. Upon completion, participants were presented with a debriefing sheet which restated the contact information of free support services (Appendix B). Participants received a course credit as a mandatory part of their course research requirements. Approval for the study was obtained from the School of Psychology Human Ethics Committee at Victoria University of Wellington prior to commencement (project #22554).

Measures

The questionnaire incorporated multiple scales to measure relationship conflict tactics, controlling behaviours that may have been used/experienced, and beliefs concerning approval of relationship violence.

The Conflict Tactics Scale - Revised (CTS2) (Straus, Hamby, Boney-McCoy, & Sugarman, 1996). The CTS2 measures the mutuality, frequency and severity of IPV that individuals might have experienced or perpetrated within an intimate relationship using five subscales: negotiation, physical assault, psychological aggression, sexual coercion, and

injury. The CTS2 is the most widely used tool in IPV research (Straus & Douglas, 2004) and comprises 39 items. Each of the items is first asked concerning the behaviour of the respondent, then secondly asked concerning the behaviour of the respondent's partner, creating a total of 78 items. Example items are "I punched or hit my partner with something that could hurt" and "My partner insisted on sex when I did not want to but did not use physical force". Responses were recorded on a Likert scale ranging from 1 = *this has never happened* to 5 = *this has happened very often in the last 12 months*. Additionally, if a behaviour had occurred within the relationship history but not within the last 12 months, it was recorded as a six. The rating system described above is a modified version of the CTS2, which simplifies responses for students. This simplified version has been successful with student samples (Graham-Kevan & Archer, 2003a). Research has demonstrated that the CTS2 has excellent internal, construct, and discriminant reliability (Straus et al., 1996). Moreover, good reliability and validity has been exhibited with student and non-student samples (Straus, 2008). The Cronbach's alpha calculated in this study was .80 for self and .84 for partner, however, Field (2013) recommends computing a reliability co-efficient for each individual subscale. For the subscales, the alpha values were as follows: negotiation (self = .75, partner = .76), psychological aggression (self = .78, partner = .79), physical assault (self = .75, partner = .81), sexual coercion (self = .48, partner = .67), and injury (self = .64, partner = .61).

The Controlling Behaviours Scale – Revised (CBS-R) (Graham-Kevan & Archer, 2005). The CBS-R is an instrument designed to measure the frequency of controlling behaviours that individuals might have experienced or perpetrated within an intimate relationship in the past 12 months. The original CBS was developed based on data from the Domestic Abuse Intervention Project (Pence & Paymar, 1986) which included examples of controlling behaviours consistently reported by victims and perpetrators to have been used by

partner violent men (Graham-Kevan & Archer, 2005). The CBS-R is comprised of 24 items across five behavioural categories: economic control, threatening control, intimidating control, emotional control, and isolating control. Each of the items is first asked concerning the behaviour of the respondent, then secondly asked concerning the behaviour of the respondent's partner, creating a total of 48 items. Example items are "threaten to leave the relationship" and "check up on the other's movements". Responses were recorded using the same Likert scale as the CTS2 (described above). Research has shown that the CBS-R has good discriminant validity (Graham-Kevan & Archer, 2003a) with a Cronbach's alpha of .87 (Graham-Kevan & Archer, 2005). In this study, the alpha values were .86 for self and .91 for partner. The values for the subscales were as follows: economic control (self = .46, partner = .57), threatening control (self = .47, partner = .53), intimidating control (self = .59, partner = .63), emotional control (self = .68, partner = .78), and isolating control (self = .80, partner = .86).

The Beliefs about Relationship Aggression Scale (BaRAS) (Dixon, In prep). The BaRAS is a self-report questionnaire designed to examine the respondents' beliefs about the acceptability and seriousness of female and male perpetrated violence in heterosexual intimate relationships. The BaRAS utilises vignettes which depict a fictional heterosexual couple whom are described as being an average sized man and woman. There are 24 vignettes in total, which manipulate the gender of the aggressor (male or female), the severity of the violence (minor or severe), and the provocation preceding the violent act. Six types of provocation are presented; sexual coercion, disobedience, physical violence, psychological aggression, infidelity, or no provocation. Five questions are asked about each vignette with the first four questions rated on a Likert scale ranging from 1 = *not at all* to 5 = *definitely*. The fifth question requires respondents to select which of the provided legal sanctions they deemed as a suitable punishment for the aggressor. An example vignette and the five

accompanying questions is provided below. This vignette depicts a female aggressor with disobedience as the provocation, and severe violence enacted:

One evening, Carol came home to find that John had not done the housework she had asked him to do and so she punched him repeatedly in the face and body.

1. To what extent do you approve of (the aggressor's) actions?
2. How likely is it that (the victim) will be physically injured, requiring medical treatment?
3. How likely is it that (the victim) will be greatly emotionally distressed?
4. How likely is it that (the victim) can defend themselves against (the aggressor)?
5. Which of the following legal sanctions do you deem suitable punishment for (the aggressor) in this instance?
 - (a) None
 - (b) Police caution
 - (c) Community service
 - (d) Up to six months in prison
 - (e) Up to three years in prison
 - (f) More than three years in prison

This study utilised responses to question one only. A total Cronbach's alpha of .82 was calculated for approval across gender and provocation categories. Alpha values were also calculated for approval of male violence across all provocation categories (.73), and approval of female violence across all provocation categories (.69). For this thesis, three levels of provocation were used.

Treatment of Data

Prior to analysis, a missing values analysis was performed. The percentage of data missingness was 1.5%. Due to the non-significance of Little's MCAR, $\lambda(653) = 519.16, p = 1.0$, the data was deemed to be missing completely at random, and was interpreted using the estimation maximization technique in SPSS. This result allowed for the missing data to be deleted (Tabachnick & Fidell, 2013).

Question One. Each response on the CTS2 was dichotomised before summing the responses in each subscale to produce the presence or absence of each subscale behaviour for every participant, and their partner. Thus, every participant had a dichotomous score on each subscale that represented their use and experience of one or more of the various conflict tactics on each subscale (score of 1) and their absence (score of 0). The CBS-R scores were scored using the same procedure. Chi square analyses were computed to examine differences within gender in the frequency of behaviours used and experienced on each CTS2 and CBS-R subscale. Additional Chi square analyses were performed to examine differences between the genders in the frequency of behaviours used and experienced. Chi square has two assumptions: independence, and expected frequencies (Field, 2013). The assumption of independence was met as each item contributed to a single cell in each contingency table. The assumption of expected frequencies states that no expected counts should be less than five: some tests violated this assumption and in these cases, Fisher's exact test was reported (Field, 2013). Effect sizes were interpreted using the phi statistic (.5 is large, .3 is moderate and .1 is small; Field, 2013).

Question Two. For the purpose of analysing approval of female and male violence under different types of provocation, responses to the BaRAS were used. Actions that related to men's and women's use of minor and severe physical violence in response to three types

of provocation (infidelity, physical violence, and no provocation) were used. Analyses were performed in three parts and will be discussed separately.

Part one. To understand the impact of provocation on the approval of IPV, a one-way repeated measures ANOVA was computed. Responses to the relevant questions were summed to provide six “any aggression” variables. These produced three scores for approval of male violence of any severity in each of the three provocation contexts, and three scores for approval of female violence of any severity in each of the three provocation contexts. Next, scores for males and females were summed and divided by two to create scores for approval of violence in three provocation categories for any gender. Scores ranged from 1 = *not at all* to 5 = *definitely*. Exploration of data indicated that the assumption of normality was violated, however, ANOVA is considered to be robust to violations with sample sizes greater than 30 (Field, 2013). Additionally, the assumption of sphericity was violated, $\chi^2(2) = 53.01$, $p < .001$, $\eta_p^2 = .28$. To account for this, epsilon (ϵ) of 0.911 as calculated by Greenhouse and Geisser (1959) was used to correct the one-way repeated measures ANOVA. Post hoc Bonferroni adjusted pairwise comparisons were computed to investigate any differences in approval between the provocation types. Effect sizes were measured using partial eta squared (.01 is small, .09 is moderate, and .25 is large; Tabachnick & Fidell, 2013).

Part two. To understand whether the approval of IPV varied across the provocation types depending on the gender of the aggressor depicted in the vignettes, a 2x3 repeated measures ANOVA was computed. A Bonferroni correction was applied, resulting in an alpha of .008. The variables used in this analysis were the six variables calculated in the first stage of part one (infidelity, physical violence and no provocation for male and female aggressors). The assumption of sphericity was violated for the interaction of provocation by aggressor's gender, $\chi^2(2) = 61.46$, $p < .001$, $\eta_p^2 = .49$. Therefore, the degrees of freedom were corrected using Greenhouse-Geisser estimates of sphericity ($\epsilon = .90$). Post hoc one-way ANOVAs were

computed to examine the differences between the gender of aggressor for each provocation type. Effect sizes were measured using partial eta squared (Tabachnick & Fidell, 2013).

Part three. To understand whether the gender of the participant had an effect on the interaction between provocation type and the depicted gender of aggressor, a 2x3x2 mixed ANOVA was computed. This analysis had two within-subjects variables: gender of aggressor with two levels, and provocation with three levels. The between groups variable was gender of participant with two levels. The assumption of sphericity was violated for the effect of provocation, $\chi^2(2) = 42.38, p < .001, \eta_p^2 = .50$, and the interaction of provocation by gender of aggressor, $\chi^2(2) = 61.46, p < .001, \eta_p^2 = .49$. Therefore, the degrees of freedom were corrected using Greenhouse-Geisser estimates of sphericity ($\epsilon = .90$). Effect sizes were measured with partial eta squared (Tabachnick & Fidell, 2013).

Question Three. For the purpose of analysing whether individuals who have used violence in their relationships differed in their approval of IPV compared to non-violent individuals, a 2x4 mixed ANOVA was computed. The CTS2 physical assault scales, and the severe psychological aggression scale described in Question One were summed to provide a scale depicting participants' use of any physical and psychological violence. This was transformed into a dichotomous variable to portray participants who had engaged in violent behaviours (score of 1), and those who had not (score of 0). Using this variable, a score was computed to create four categories: 1 = non-violent females, 2 = violent females, 3 = non-violent males, and 4 = violent males. The three approval variables created in Question Two part one for male aggressors were summed, and divided by three (number of provocation types): the score approach was taken for the three approval variables for female violence. This produced two variables; one depicting approval of physical IPV for male aggressors and one for female aggressors across the three provocation contexts. Scores ranged from 1 = *not at all* to 5 = *definitely* for each variable. The assumption of normality was violated, however,

ANOVAs are robust to violations (Field, 2013). The assumption of sphericity was met for this question. Bonferroni adjusted post hoc comparisons, and post hoc one-way repeated measure ANOVAs were computed. Effect sizes were measured using partial eta squared (Tabachnick & Fidell, 2013).

Question Four A. To examine whether the current sample could be classified using a typological approach, variables concerning violence and controlling behaviours were required to classify participants based on the high and low control categories found by Johnson (1999, 2008). Some of Johnson's (1999) control variables were not applicable for a dating violence population (e.g., using violence against children). More recent literature has studied some combination of typical control tactics and CTS physical assault scale items. For this study, it was decided to analyse measures of control and physical violence to be consistent with the international literature: specifically, the most recent and validated measures of control and physical violence. All questions on the CBS-R, and all questions on the CTS2 physical assault scale were used for the analysis.

A latent profile analysis (LPA) was used to identify latent profiles of control within the sample. Johnson and subsequent researchers have utilised cluster analysis, however, LPA has been demonstrated to be superior in detecting latent taxonomy (Tein, Coxe, & Cham, 2013), and it generates fit statistics before assigning individuals to different profiles (Isler, Liu, Sibley, & Fletcher, 2016). LPA is a mixture modelling technique “based on measurement theory that a latent grouping variable can be inferred from a set of indicators, such that individuals in each group share common patterns of variable scores” (Isler et al., 2016, p. 278). LPA was conducted using Mplus software (version 8). The number of profiles in a solution is determined by the interpretability of the solution accounting for theoretical considerations, and by using relative fit statistics that are generated by Mplus (Isler et al., 2016). Johnson (1999) used an artificially constructed sample in which individuals’ responses

about their partner's behaviour were treated as separate cases, however, this violates the assumption of local independence (Oberski, 2015). To account for this, two separate LPAs were computed: one for participants' actions and one for their partners' actions. Performing two grouping analyses has also been done by other researchers (e.g., Bates, Graham-Kevan, & Archer, 2014). Latent profile membership was saved as a variable. Participants and their partners were compared to determine relationship dyads, and Johnson's categories.

Question Four B. For the purpose of analysing whether violent male and female participants classified using Johnson's typology differed in their approval of male and female violence compared to non-violent individuals, a 2x2x3 mixed ANOVA was computed. In line with Johnson's theory, this analysis was concerned with understanding differences between participants who had reported perpetrating violence in the context of their own use of high and low control tactics. Therefore, individuals who were classified into the VR group were excluded from this stage of the analysis. Considering that participants classified into the CCV and MVC groups were both perpetrating physical violence in the context of high control, they formed a single group for the purpose of this analysis. Participants who did not engage in physical violence regardless of their level of control were considered as non-violent, and were used as a comparison group. This approach was taken to be consistent with the methodology established by previous replications. This analysis had one within-subjects variable: gender of aggressor with two levels, and two between-subjects variables: gender of participant with two levels, and typology group with three levels (SCV; coercively controlling and non-violent). The male and female approval variables calculated for Question Two were used (approval of male and female IPV regardless of provocation). The approval scores ranged from 1 = *not at all* to 5 = *definitely*. The assumptions of sphericity and homogeneity of variance were met for this question. Post hoc Bonferroni adjusted pairwise

comparisons, repeated measures ANOVAs, and univariate ANOVAs were computed. Effect sizes were measured with partial eta squared (Tabachnick & Fidell, 2013).

Results

Question One: what is the nature and prevalence of different conflict tactics used during relationship conflict within the past twelve months?

Within gender differences. Table 1 and Table 2 depict the subscale scores for the CTS2 and CBS-R for men and women respectively. The tactics used and experienced by each gender are reported alongside results of bivariate analysis that examine differences in the frequency of perpetration (use) and victimisation (experiences) of each tactic.

Males reported experiencing significantly more acts of severe physical assault, $\chi^2(1) = 5.0, p = .025, \Phi = .11$, and minor injuries, $\chi^2(1) = 7.55, p = .006, \Phi = .13$, than they perpetrated. Females reported experiencing significantly more acts of minor, $\chi^2(1) = 14.54, p < .001, \Phi = .16$, and severe, $\chi^2(1) = 4.54, p = .033, \Phi = .08$, sexual coercion than they perpetrated. Furthermore, females reported perpetrating significantly more acts of minor physical assault than they reported experiencing, $\chi^2(1) = 5.22, p = .022, \Phi = -.09$. All of the above effect sizes were small, indicating that men and women likely use conflict tactics as often as they experience them.

Table 1

The frequency of conflict tactics and controlling behaviours that male participants reported using and experiencing in the past 12 months (n = 216)

	Tactics used <i>n</i> (%)	Tactics experienced <i>n</i> (%)	Chi square	Phi
CTS2 subscales				
Negotiation				
Emotional	215 (99.5)	215 (99.5)	FE = 1.0 <i>p</i> = 1.0	.00
Cognitive	215 (99.5)	213 (98.6)	FE = .62 <i>p</i> = .315	-.05
Psychological aggression				

	Tactics used <i>n</i> (%)	Tactics experienced <i>n</i> (%)	Chi square	Phi
Minor	163 (75.5)	166 (76.9)	0.12 <i>p</i> = .735	.02
Severe	64 (29.6)	77 (35.6)	1.78 <i>p</i> = .182	.06
Physical assault				
Minor	71 (32.9)	77 (35.6)	0.37 <i>p</i> = .544	.03
Severe	12 (5.6)	25 (11.6)	4.99 <i>p</i> = .025*	.11
Sexual coercion				
Minor	79 (36.6)	79 (36.6)	0.00 <i>p</i> = 1.0	.00
Severe	4 (1.9)	4 (1.9)	FE = 1.0 <i>p</i> = 1.0	.00
Injury				
Minor	4 (1.9)	16 (7.4)	7.55 <i>p</i> = .006*	.13
Severe	1 (.5)	2 (.9)	FE = 1.0 <i>p</i> = .562	.03
CBS-R subscales				
Economic	178 (82.4)	185 (85.6)	0.85 <i>p</i> = .358	.04
Threatening	69 (31.9)	81 (37.5)	1.47 <i>p</i> = .225	.06
Intimidating	102 (47.2)	106 (49.1)	0.15 <i>p</i> = .700	.02
Emotional	129 (59.7)	129 (59.7)	0.00 <i>p</i> = 1.0	.00
Isolating	164 (75.9)	177 (81.9)	2.35 <i>p</i> = .125	.07

Note. FE = Fishers Exact.

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

Table 2

The frequency of conflict tactics and controlling behaviours that female participants reported using and experiencing in the past 12 months (n = 299)

	Tactics used n (%)	Tactics experienced n (%)	Chi square	Phi
CTS2 subscales				
Negotiation				
Emotional	298 (99.7)	297 (99.3)	FE = 1.0 $p = .563$	-.02
Cognitive	294 (98.3)	295 (98.7)	FE = 1.0 $p = .737$	.01
Psychological aggression				
Minor	258 (86.3)	244 (81.6)	2.43 $p = .119$	-.06
Severe	89 (29.8)	83 (27.8)	0.29 $p = .588$	-.02
Physical assault				
Minor	108 (36.1)	82 (27.4)	5.22 $p = .022^*$	-.09
Severe	32 (10.7)	26 (8.7)	0.69 $p = .407$	-.03
Sexual coercion				
Minor	78 (26.1)	122 (40.8)	14.54 $p < .001^{**}$	.16
Severe	2 (.7)	9 (3)	4.54 $p = .033^*$	.08
Injury				
Minor	12 (4)	16 (5.4)	0.60 $p = .439$	.03
Severe	0 (0)	1 (.3)	FE = 1.0 $p = .317$	.04
CBS-R subscales				

	Tactics used <i>n</i> (%)	Tactics experienced <i>n</i> (%)	Chi square	Phi
Economic	230 (76.9)	237 (79.3)	0.48 <i>p</i> = .489	.03
Threatening	130 (43.5)	106 (35.5)	4.03 <i>p</i> = .045*	-.08
Intimidating	147 (49.2)	152 (50.8)	0.17 <i>p</i> = .683	.02
Emotional	193 (64.5)	185 (61.9)	0.46 <i>p</i> = .498	-.03
Isolating	234 (78.3)	220 (73.6)	1.79 <i>p</i> = .181	-.06

Note. FE = Fishers Exact.

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

Analysis of the CBS-R found that females used significantly more threats than they experienced, $\chi^2(1) = 4.03$, *p* = .045, $\Phi = -.08$, although the effect size was small. No other significant differences in the frequency of use, or experience of controlling behaviours for males or females were found. These results indicate that men and women likely use as many controlling behaviours as they experience.

Between gender differences. Table 3 depicts the statistical analysis that tested for differences between male and female participants' use and experience of the CTS2 and CBS-R tactics respectively. Chi square tests demonstrated that females perpetrated significantly more minor psychological aggression, $\chi^2(1) = 9.85$, *p* = .002, $\Phi = .14$, and severe physical assault, $\chi^2(1) = 4.25$, *p* = .039, $\Phi = .09$, than males. Males perpetrated significantly more minor sexual coercion than females, $\chi^2(1) = 6.51$, *p* = .011, $\Phi = -.11$. For controlling behaviours, females used significantly more threats than males, $\chi^2(1) = 7.04$, *p* = .008, $\Phi = -.02$, and males experienced significantly more isolating behaviours than females, $\chi^2(1) =$

4.97, $p = .026$, $\Phi = -.10$. All of the above effect sizes are small, indicating that the use and experience of conflict tactics and controlling behaviours is similar between men and women.

Table 3

The difference between males and females use and experience of various conflict tactics and controlling behaviours during times of conflict with their intimate partner in the past 12 months (N = 515)

	Used		Experienced	
	Chi square	Phi	Chi square	Phi
CTS2 subscales				
Negotiation				
Emotional	FE = 1.0 $p = .817$	.01	FE = 1.0 $p = .762$	-.01
Cognitive	FE = 0.41 $p = .207$	-.06	FE = 1.0 $p = .961$	.002
Psychological aggression				
Minor	9.85 $p = .002^*$	.14	1.75 $p = .186$	.06
Severe	0.00 $p = .973$	.00	3.64 $p = .056$	-.08
Physical assault				
Minor	0.58 $p = .445$	.03	3.97 $p = .046^*$	-.09
Severe	4.25 $p = .039^*$	.09	1.17 $p = .281$	-.05
Sexual coercion				
Minor	6.51 $p = .011^*$	-.11	0.94 $p = .332$	.04
Severe	FE = .24 $p = .217$	-.05	0.68 $p = .408$	.04
Injury				

	Used		Experienced	
	Chi square	Phi	Chi square	Phi
Minor	1.95 <i>p</i> = .163	.06	0.91 <i>p</i> = .340	-.04
Severe	FE = .42 <i>p</i> = .239	-.05	FE = .58 <i>p</i> = .384	-.04
CBS-R subscales				
Economic	2.29 <i>p</i> = .130	.07	3.45 <i>p</i> = .063	.08
Threatening	7.04 <i>p</i> = .008*	.12	.23 <i>p</i> = .633	.02
Intimidating	0.19 <i>p</i> = .663	.02	0.16 <i>p</i> = .693	.02
Emotional	1.25 <i>p</i> = .264	.05	0.24 <i>p</i> = .622	.02
Isolating	0.39 <i>p</i> = .533	.03	4.97 <i>p</i> = .026*	.10

Note. FE = Fishers Exact.

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

Question Two: what is the dominant collective belief concerning the approval of any physical IPV perpetrated by the different sexes under different levels of provocation?

Part one: what impact does provocation have on participants' approval of IPV?

Table 4 depicts the descriptive statistics for the approval scores across the three provocation types. A one-way repeated measures ANOVA was computed. There was a statistically significant large effect of provocation, $F(1.82, 936.10) = 472.59, p < .001, \eta_p^2 = .49, \epsilon = .91$, indicating that provocation altered participants' approval of IPV. Post hoc Bonferroni adjusted pairwise comparisons were computed (see Table 5). These results indicate that participants were the most approving of IPV when it was enacted in response to physical violence, and were the least approving when enacted following no provocation.

Table 4

Means, standard deviations, and confidence intervals for approval scores across three provocation contexts (N = 515)

Provocation	Mean	SD	95% CI	
			Lower	Upper
Infidelity	1.54	0.60	1.49	1.59
None	1.05	0.27	1.02	1.07
Physical violence	1.91	0.74	1.85	1.97

Table 5

Mean differences in approval of physical violence used by participants in response to three provocation contexts

Provocation category (I)	Provocation category (J)	Mean diff (I-J)	SE	95% CI		Sig
				Lower	Upper	
Infidelity	None	0.49	0.03	0.43	0.55	< .001**
	PV	-0.37	0.03	-0.44	-0.31	< .001**
None	PV	-0.86	0.03	-0.94	-0.79	< .001**

Note. PV = Physical violence.

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

Part two: is the relationship between provocation and approval moderated by the gender of the aggressor? Table 6 displays the descriptive statistics on approval of IPV for male and female aggressors. A 2x3 repeated measures ANOVA was computed with a Bonferroni correction of .008. Two one-way repeated measure ANOVAs were run to examine the main effects of provocation and gender of aggressor. There was a statistically significant large main effect of provocation, $F(1.82, 936.10) = 472.59, p < .001, \eta_p^2 = .49, \epsilon = .91$, which showed that approval was at its highest when aggression occurred in response to

physical violence; this is consistent with the pattern shown in Question Two part one. There was also a statistically significant large main effect of gender of aggressor, $F(1, 514) = 378.15, p < .001, \eta_p^2 = .42$, indicating that participants' approval of IPV changed depending on whether the aggressor was male ($M = 1.32, SD = 0.42$) or female ($M = 1.68, SD = 0.55$). There was a statistically significant interaction between provocation and gender of aggressor with a large effect, $F(1.80, 923.71) = 250.89, p < .001, \eta_p^2 = .33, \epsilon = .90$, showing that participants' approval of IPV changed depending on the context (provocation), and the aggressor's gender. Figure 1 displays a pictorial representation of this interaction.

Table 6

Means, standard deviations and confidence intervals for male and female participants' approval of male and female IPV in response to three different provocation contexts (N = 515)

Gender of participant	Provocation	Gender of aggressor	Mean	SD	95% CI	
					Lower	Upper
Male	Infidelity	M	1.42	0.65	1.34	1.50
		F	1.81	0.74	1.71	1.91
	None	M	1.03	0.17	0.99	1.07
		F	1.05	0.26	1.01	1.09
	PV	M	1.68	0.72	1.59	1.77
		F	2.57	1.03	2.46	2.70
Female	Infidelity	M	1.35	0.57	1.28	1.42
		F	1.62	0.74	1.53	1.70
	None	M	1.06	0.37	1.03	1.10
		F	1.04	0.30	1.01	1.07
	PV	M	1.42	0.62	1.34	1.49
		F	2.09	0.95	1.98	2.20

Note. PV = Physical violence. M = male. F = female.

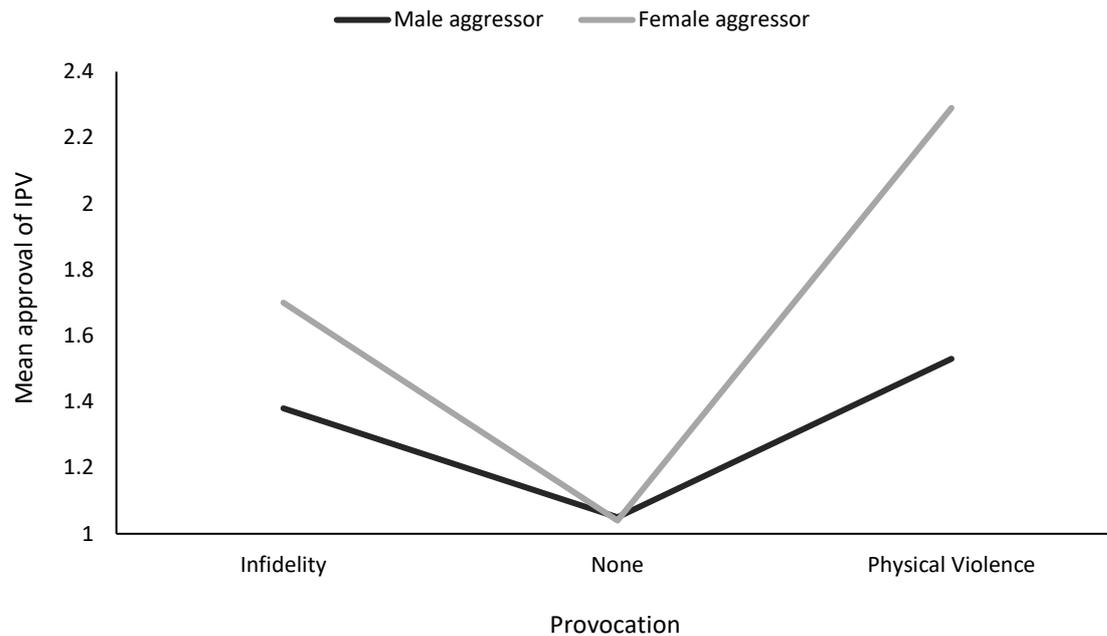


Figure 1. Mean approval of physical IPV used by either a male or female aggressor in response to three provocation types (N = 515).

In order to unpack the interaction, post hoc Bonferroni adjusted pairwise comparisons were computed to examine differences in approval for male and female violence. Results indicate that participants approved of IPV significantly more when the aggressor was a female (1.32 +/- 0.42 for male aggressors to 1.68 +/- 0.55 for female aggressors, showing a mean difference of -0.36 +/- .02, $p < .001$). In order to examine whether participants' approval of IPV differed between the gender of the aggressor for each provocation type, three post hoc one-way repeated measures ANOVAs were computed. Results indicate that participants approved of female IPV significantly more than male IPV when the provocation contexts of infidelity and physical violence were described, $F(1, 514) = 147.39$, $p < .001$, $\eta_p^2 = .22$, and, $F(1, 514) = 406.60$, $p < .001$, $\eta_p^2 = .44$, respectively. These effects were moderate and large. No significant difference between male and female approval scores were found in the context of no provocation, $F(1, 514) = 0.25$, $p = .616$, $\eta_p^2 = .00$.

Part three: is the relationship between provocation and gender of aggressor moderated by the gender of the participant? The descriptive statistics for approval of male and female violence for male and female participants can be seen in Table 6. A 2x3x2 ANOVA was computed. Two one-way repeated measure ANOVAs were run to examine the main effects of provocation and gender of aggressor. There was a statistically significant large main effect of provocation, $F(1.85, 950.49) = 514.50, p < .001, \eta_p^2 = .50, \varepsilon = .93$, which indicates that approval changed based on the provocation shown; this is consistent with the pattern shown in Question Two part one. There was also a statistically significant large main effect of gender of aggressor, $F(1, 513) = 398.99, p < .001, \eta_p^2 = .44$, indicating that participants' approval of IPV changed depending on whether the aggressor was male or female. This is consistent with the pattern shown in Question Two part two. A one-way univariate independent ANOVA was computed to examine the main effect of gender of participant indicating that male participants approved of IPV differently than female participants, $F(1, 513) = 17.49, p < .001, \eta_p^2 = .03$. However, the effect size was small which indicates that male and female participants likely have similar levels of approval. The three-way interaction between provocation, gender of aggressor, and gender of participant was not statistically significant, $F(1.80, 923.31) = 2.73, p = .071, \eta_p^2 = .01, \varepsilon = .90$, with a small effect size. This result shows that male (Figure 2) and female (Figure 3) participants have a similar pattern of IPV approval when considering both the context (provocation) as well as the gender of the aggressor.

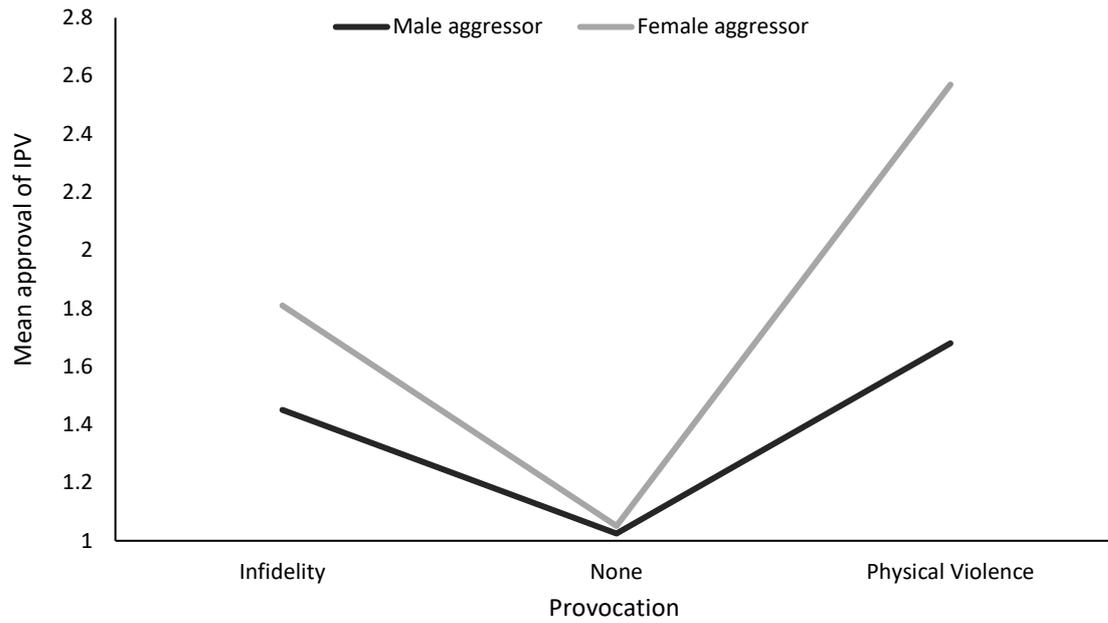


Figure 2. Male participants' approval of IPV used by any aggressor in the context of difference types of provocation (n = 216).

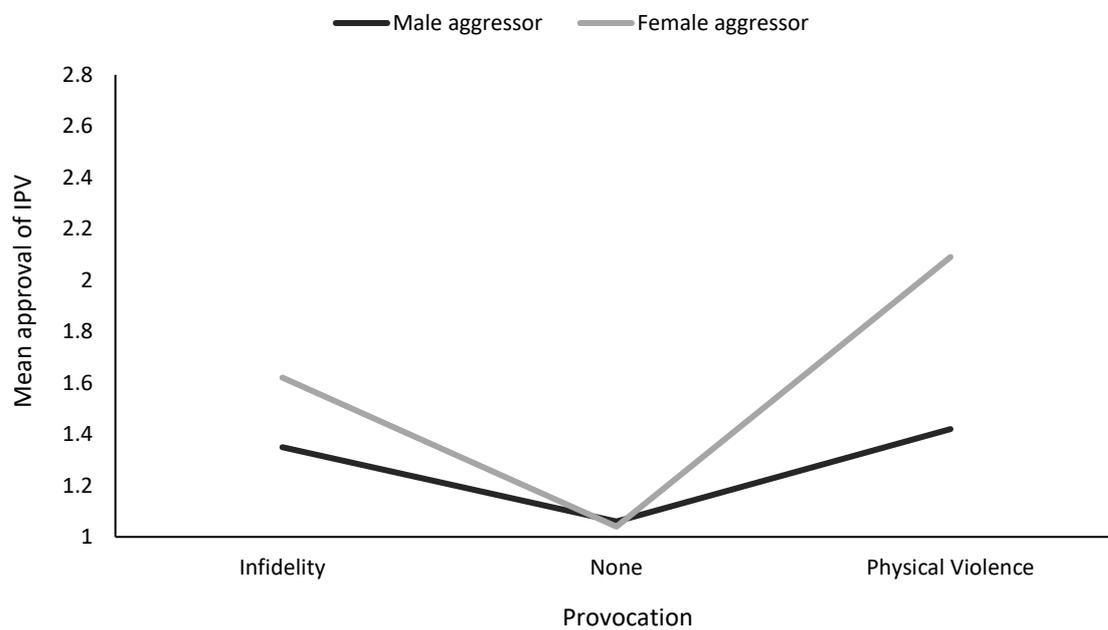


Figure 3. Female participants' approval of IPV used by any aggressor in the context of difference types of provocation (n = 299).

Question Three: do men and women who have used violence in a relationship during the past twelve months differ in their approval ratings compared to non-violent individuals?

The descriptive statistics for approval of male and female violence for violent and non-violent men and women are presented in Table 7. A 2x4 mixed ANOVA was computed. There was a statistically significant large main effect of gender of aggressor, $F(1, 511) = 397.20, p < .001, \eta_p^2 = .44$, indicating that participants approved of female IPV more than male IPV. This is consistent with the pattern found in Question Two. Furthermore, there was a statistically significant moderate main effect of violence group, $F(3, 511) = 18.15, p < .001, \eta_p^2 = .10$, indicating that approval differed by group status (violent or non-violent). There was a statistically significant interaction between gender of aggressor and violence group with a small effect, $F(3, 511) = 5.29, p = .001, \eta_p^2 = .03$. This indicates that violent and non-violent participants approved of IPV differently depending on the gender of the aggressor, however, the differences are likely to be negligible.

Table 7

Means and standard deviations of IPV approval based on gender of aggressor for violent and non-violent participants (N = 515)

Violence group	N	Male aggressor	Female aggressor
		<i>M (SD)</i>	<i>M (SD)</i>
FNV	157	1.20 (0.32)	1.46 (0.46)
FV	142	1.37 (0.52)	1.71 (0.60)
MNV	119	1.26 (0.39)	1.71 (0.52)
MV	97	1.52 (0.45)	1.93 (0.51)

Note. FNV = Female non-violent. FV = Female violent. MNV = Male non-violent. MV = Male violent.

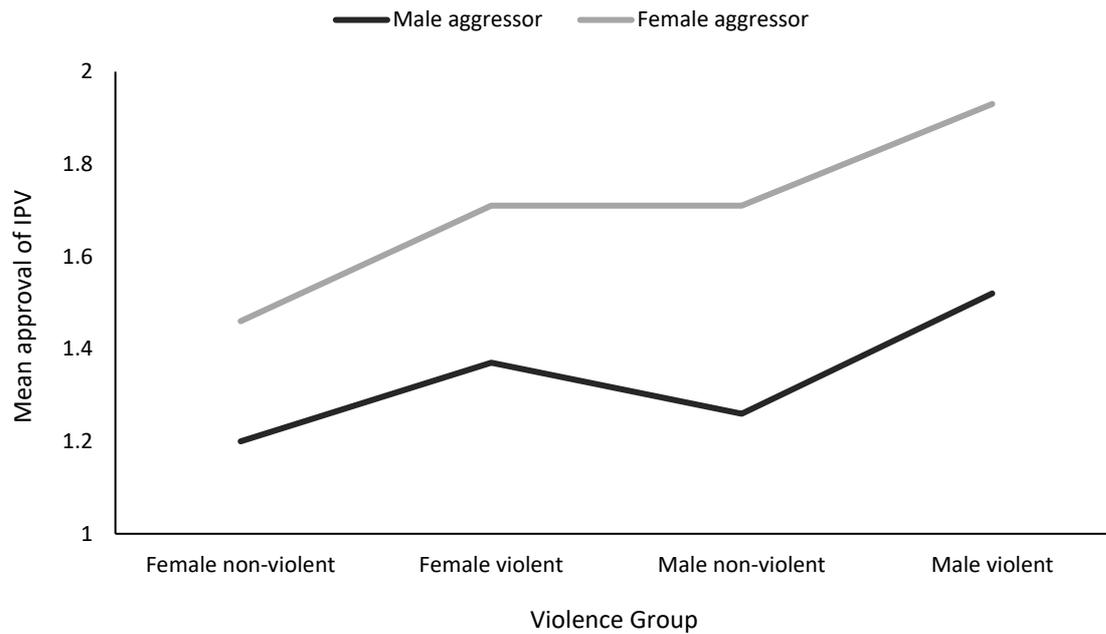


Figure 4. Mean approval of IPV for non-violent and violent male and female participants when the aggressor is a male or female (N = 515).

To examine the interaction further, four post hoc one-way repeated measures ANOVAs were computed to look for differences in approval of male and female violence for each group. A Bonferroni correction was implemented, resulting in an alpha value of .013. Results indicate that all groups approved of female violence significantly more than male violence (non-violent females: $F(1, 156) = 84.16, p < .001, \eta_p^2 = .35$; violent females: $F(1, 141) = 91.14, p < .001, \eta_p^2 = .39$; non-violent males: $F(1, 118) = 119.97, p < .001, \eta_p^2 = .50$ and violent males: $F(1, 96) = 95.94, p < .001, \eta_p^2 = .50$). All of the above effect sizes were large.

Post hoc Bonferroni adjusted comparisons were computed to examine differences in approval of IPV for violent and non-violent male and female participants (see Table 8). Results show that violent females approved of IPV more than non-violent females while violent males approved of IPV more than non-violent females, non-violent males, and violent females. No other significant differences arose.

Table 8

Bonferroni adjusted post hoc comparisons comparing the approval of IPV for violent and non-violent male and female participants

Violence group (I)	Violence group (J)	Mean diff (I-J)	SE	95% CI		Sig.
				Lower	Upper	
FNV	FV	-0.21	0.49	-0.34	-0.08	< .001**
	MNV	-0.16	0.51	-0.29	-0.02	.014
	MV	-0.39	0.054	-0.54	-0.25	< .001**
FV	MNV	0.06	0.05	-0.83	0.19	1.000
	MV	-0.18	0.55	-0.33	-0.04	.007*
MNV	MV	-0.24	0.06	-0.39	-0.08	< .001**

Note. FNV = Female non-violent. FV = Female violent. MNV = Male non-violent. MV = Male violent.

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

Question Four A: to what extent can the sample be classified using Johnson's typology?

Latent profile analysis results. Two, three and four profile solutions were tested, and considered. There is no common standard for selecting criteria to judge best fit of a solution, allowing researchers to use a combination of fit criteria in determining the number of profiles (Nylund, Asparouhov, & Muthén, 2007; Tein et al., 2013). Fit statistics generated by Mplus are frequently used to help measure solution fit: the most commonly used fit statistics fall into the categories of information-theoretic methods, likelihood ratio statistical tests, and entropy based measures (Tein et al., 2013). Information-theoretic models are based on “maximum likelihood estimates of the model parameters for selecting the most parsimonious and correct model” (Tein et al., 2013, p. 643) in which a lower value represents a better fit. Likelihood ratio statistical tests compare the fit of a solution to the fit of a hypothetical solution with one less profile, and produce a p value to represent the likelihood that a solution provides a significantly better fit than the hypothetical solution (Isler et al., 2016; Tein et al.,

2013). Entropy is a measure based on the uncertainty of classification that is assessed as profile membership probability (i.e., the probability that an individual belongs in each profile; Isler et al., 2016). Entropy is commonly measured on the interval of 0-1: a higher value represents a better fit with .80 or above indicating that the profiles are highly discriminant (Isler et al., 2016; Tein et al., 2013). For this study, solution fit was compared using Bayesian Information Criterion (BIC), Lo-Mendell-Rubin likelihood ratio statistical test (LMR), and entropy/profile membership probability.

Table 9 and Table 10 present the fit statistics generated by Mplus for two, three, and four profile solutions for participants and partners respectively. The BIC decreased with the adding of each new profile for both participants and partners, suggesting a better fit for the data. The relative entropy scores for participants and partners were high (above .80) with the highest entropy in the two profile solutions. Additionally, the profile membership probabilities were robust, indicating that each individual seemed to belong in the profile they were assigned to. The LMR value for participants was non-significant for each solution, indicating that the pattern of control was similar for the profiles, and that a single continuous profile solution may provide a better fit. However, a better fit does not always mean a better solution (Oberski, 2015). The goal of LPA is to find different subgroups within the population who have demonstrated different patterns of association between variables. Moreover, when the distance between profiles is small, LPA has little power to detect the correct number of profiles with any fit statistics, especially LMR (Tein et al., 2013). In these instances, LMR is more likely to select a solution with fewer profiles than were actually present (Tein et al., 2013). While the pattern of the two profiles for participants was similar, there was a profile using higher amounts of control (Figure 5). Additionally, a Mann-Whitney test indicated that the participant high control profile used significantly more controlling behaviours ($Mdn = 28.0$) than the participant low control profile ($Mdn = 8.0$), $U = 22, 197.5$,

$p < .001$, $r = .49$. The LMR value for the partner two profile solution was significant while the three and four profiles were not, indicating that the two profile solution provides a better fit for the partner data.

Determining the correct number of profiles depends on a number of factors in addition to the fit statistics, including theoretical justification, and interpretability of the solutions (Isler et al., 2016; Jung & Wickrama, 2007). Previous research has found and implemented two profile solutions of control (Graham-Kevan & Archer, 2003b; Johnson, 1999; Johnson & Leone, 2005). Due to the convergent information from the fit statistics, theory, and interpretability, two profile solutions for participants and partners were selected for this study which are illustrated in Figure 5 and Figure 6 respectively.

Table 9

Solution fit statistics: two, three, and four profile solutions for participants (n = 515)

No. of profiles	BIC	LMR	Profile membership probability				
			Entropy	Profile 1	Profile 2	Profile 3	Profile 4
2	11913	.41	.97	.94	.97	-	-
3	11412	.13	.93	.99	.92	1.0	-
4	11133	.45	.90	.84	1.0	.98	.97

Note. BIC = Bayesian Information Criterion. LMR = Lo-Mendell-Rubin likelihood ratio test.

Table 10

Solution fit statistics: two, three, and four profile solutions for partners (n = 515)

No. of profiles	BIC	LMR	Profile membership probability				
			Entropy	Profile 1	Profile 2	Profile 3	Profile 4
2	11880	.02	.99	.998	.995	-	-
3	11556	.17	.97	.99	1.0	.93	-
4	11320	.22	.92	1.0	.98	.996	.86

Note. BIC = Bayesian Information Criterion. LMR = Lo-Mendell-Rubin likelihood ratio test.

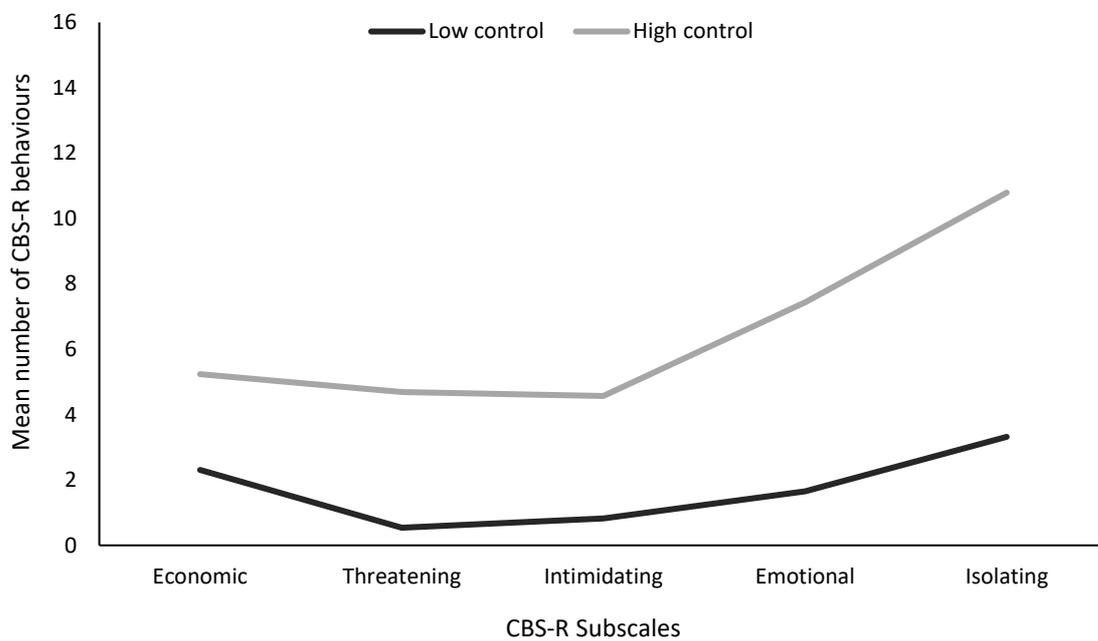


Figure 5. Two profile LPA of the CBS-R subscales for participants (n = 515).

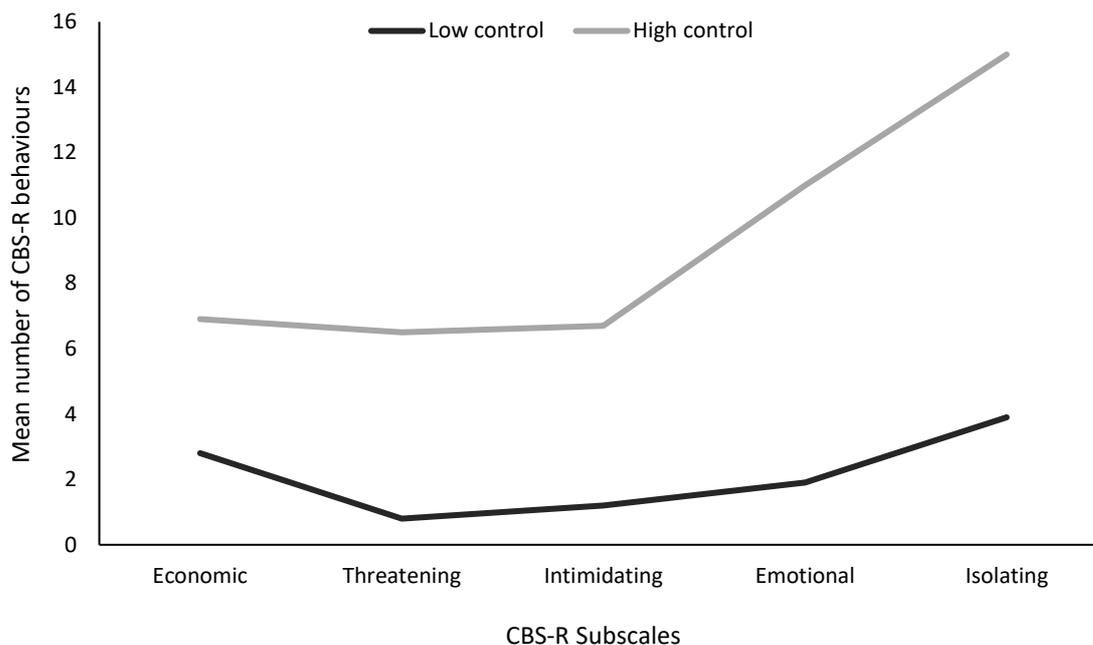


Figure 6. Two profile LPA of the CBS-R subscales for partners (n = 515).

Table 11

Prevalence of control profiles by sex for study participants and their partner reports (N = 1030)

		Male	Female	Total
Participant (n = 515)	Low control	198 (91.7%)	269 (90%)	467 (90.7%)
	High control	18 (8.3%)	30 (10%)	48 (9.3%)
Partner (n = 515)	Low control	275 (92%)	199 (92.1%)	474 (92%)
	High control	24 (8%)	17 (7.9%)	41 (8%)

Note. Reports on both men and women from one partner.

Description of profiles, and creating Johnson's typology. Table 11 presents the figures and percentages of participants, and their partners in each of the control profiles by sex. The majority of participants and partners were in the low control profiles with a similar percentage of male and females in the high control profiles. Using the control profiles, participants and their partners were compared to their CTS2 physical assault responses to determine those who were violent and those who were not. Physical violence was treated as a

dichotomous variable in which those who had used one or more acts of violence were classified as physically violent. The frequencies and percentages in Table 12 show that there were male and female participants and partners who had used physical violence in both the high and low control profiles. In total, across sex categories, there were 193 violent participants of which 39 (20%) were highly controlling, and there were 172 violent partners of which 39 (16.3%) were highly controlling.

Table 12

Prevalence of control and physical violence profiles by sex for study participants, and their partner reports (N = 1030)

			Non-violent	Violent
Participant (n = 515)	Male (n = 216)	Low control	137 (63.4%)	61 (28.2%)
		High control	2 (1%)	16 (7.4%)
	Female (n = 299)	Low control	176 (58.8%)	93 (31.1%)
		High control	7 (2.4%)	23 (7.7%)
Partner (n = 515)	Male (n = 299)	Low control	187 (62.5%)	88 (29.4%)
		High control	9 (3%)	15 (5%)
	Female (n = 216)	Low control	143 (66.2%)	56 (25.9%)
		High control	4 (1.9%)	13 (6%)

Each participant and partner was coded as non-violent (NV), using low control and violence (SCV), or using high control and violence (CCV) based on Johnson's labels. These classifications were used to create relationship dyads by pairing each participant with their partner (see Table 13). Most of the sample were in non-violent relationships (n = 301, 58.4%) or relationships in which one or both partners engaged in SCV (n = 166, 32.2%). The relationship dyads were simplified to classify the violent male and female study participants according to Johnson's categories (see Table 14). To be consistent with previous literature, only individuals who had used violence at least once in the past 12 months were included in

the typology. Bivariate analyses were computed to examine differences in the frequency at which men and women were classified into each group. Results indicate that there was no significant difference in the frequency by which men ($n = 6, 30\%$) and women ($n = 14, 70\%$) were classified into the CCV group, $\chi^2(1) = 3.2, p = .074, \Phi = .40$, with a moderate effect size. Additionally, there were no differences in the frequency by which men and women were classified into the VR and MVC groups: VR men ($n = 3, 75\%$) and VR women ($n = 1, 25\%$), $\chi^2(1) = 1.0, p = .630, \Phi = .50$, with a large effect size; MVC men ($n = 10, 52.6\%$) and MVC women ($n = 9, 47.4\%$), $\chi^2(1) = 0.53, p = .819, \Phi = .17$, with a small effect size. Finally, there was a small significant difference in the frequency in which men and women were classified as SCV, $\chi^2(1) = 7.71, p = .006, \Phi = .23$, with more women in this group ($n = 92, 61.3\%$) than men ($n = 58, 38.7\%$). Due to the effect size, however, this difference is likely to be unimportant.

Table 13

Prevalence of relationship dyads in the sample

Relationship dyad (participant - partner)	Frequency	Percentage	Johnson's label
Non-violent - Non-violent	301	58.4	NV
Non-violent - Situational Couple Violence	16	3.1	
Situational Couple Violence - Non-violent	34	6.6	SCV
Situational Couple Violence - Situational Couple Violence	116	22.5	
Situational Couple Violence - Coercive Controlling Violence	4	0.8	VR
Non-violent - Coercive Controlling Violent	5	1.0	
Coercive Controlling Violence - Situational Couple Violence	12	2.3	CCV
Coercive Controlling Violence – Non-violent	8	1.6	
Coercive Controlling Violence - Coercive Controlling Violence	19	3.7	MVC

NV = Non-violent. SCV = Situational Couple Violence. VR = Violent Resistance. CCV = Coercive Controlling Violence.

MVC = Mutual Violent Control.

Table 14

Prevalence of controlling and violent relationships within the sample by sex using Johnson's typology

	Male n = 77	Female n = 116	Total n = 193
Situational Couple Violence	58 (75.3%)	92 (79.3%)	150 (77.7%)
Violent Resistant	3 (3.9%)	1 (0.86%)	4 (2.1%)
Coercive Controlling Violence	6 (7.8%)	14 (12.1%)	20 (10.4%)
Mutual Violent Control	10 (13%)	9 (7.8%)	19 (9.8%)

Question Four B: is there a relationship between the strength of the dominant collective belief and Johnson's typology?

The descriptive statistics for approval of male and female violence for men and women classified using the typology are presented in Table 15. A 2x2x3 mixed ANOVA was computed. The analysis focused on the difference between violent participants who were violent in the context of high and low control, compared to non-violent controls. As such VR participants were excluded, and CCV and MVC participants were treated as a single coercively controlling group for this analysis.

Table 15

Means, standard deviations, and confidence intervals for male and female participants' approval of male and female IPV by typology group (N = 511)

Gender of participant	Typology group	Gender of aggressor	Mean	SD	95% CI	
					Lower	Upper
Male	NV	M	1.27	0.31	1.12	1.33
		F	1.74	0.53	1.65	1.82
	SCV	M	1.49	0.39	1.39	1.58
		F	1.84	0.46	1.71	1.96
	CC	M	1.81	0.61	1.63	1.99
		F	2.26	0.55	2.01	2.51
Female	NV	M	1.21	0.33	1.15	1.27
		F	1.48	0.46	1.40	1.55
	SCV	M	1.36	0.55	1.27	1.45
		F	1.71	0.61	1.60	1.82
	CC	M	1.46	0.57	1.29	1.64
		F	1.86	0.66	1.67	2.01

Note. NV = Non-violent. SCV = Situational Couple Violence. CC = Coercively Controlling. M = male, F = female.

Three one-way ANOVAs were computed to examine the main effects. First, a one-way repeated measures ANOVA was computed to examine the main effect of gender of aggressor, indicating that participants approved of female violence more than they approved of male violence with a large effect, $F(1, 510) = 370.19, p < .001, \eta_p^2 = .42$. This result is consistent with the findings discussed in Question Two and Question Three. Second, a one-way univariate independent ANOVA was computed to examine the main effect of typology group, revealing that participants approved of IPV differently depending on which group they were classified as, $F(2, 505) = 22.67, p < .001, \eta_p^2 = .08$. However, since the effect size was small, differences between the groups are likely to be minor. Finally, a one-way univariate independent ANOVA was computed to examine the main effect of gender of participant, suggesting that male participants approve of IPV differently than female participants with a small effect, $F(1, 509) = 16.96, p < .001, \eta_p^2 = .03$. This implies that there are minimal differences in approval between men and women which is consistent with the finding discussed in Question Two part three.

A 2x2 independent samples ANOVA was computed to examine the interaction between gender of participant and typology group. This interaction was non-significant with a small effect size, $F(2, 505) = 1.32, p = .268, \eta_p^2 = .01$, indicating that male and female participants approved of IPV similarly regardless of group status (Figure 7).

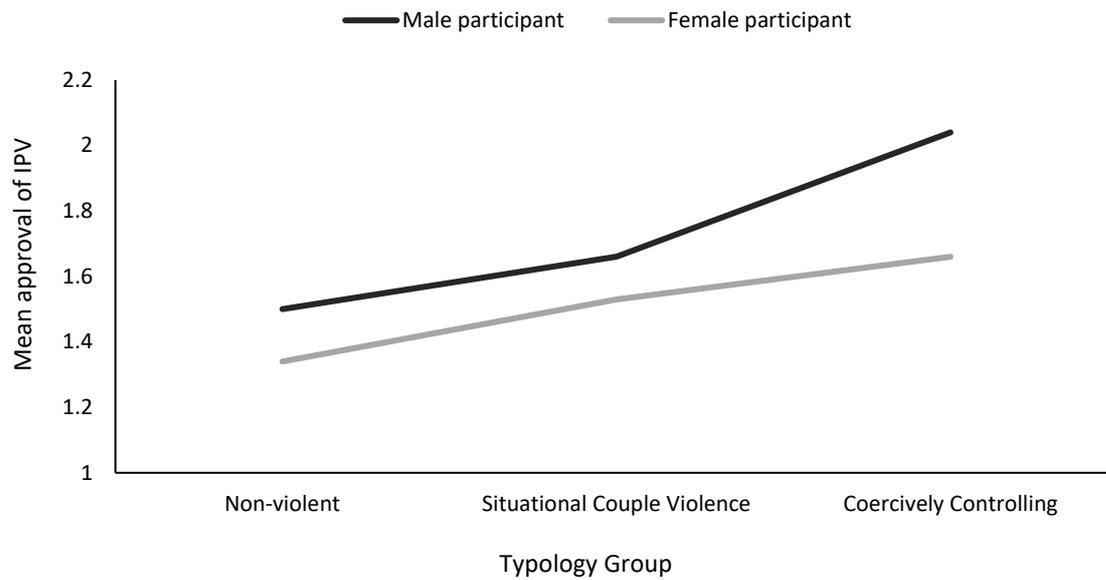


Figure 7. Mean approval of IPV for male and female participants by typology group (N = 511).

A 2x2 mixed ANOVA was computed to examine the interaction between gender of participant and gender of aggressor. This interaction was significant with a small effect size, signifying that male and female participants approved of male and female violence differently, $F(1, 509) = 12.10, p = .001, \eta_p^2 = .02$, (Figure 8). However, since the effect was small, differences are likely to be inconsequential.

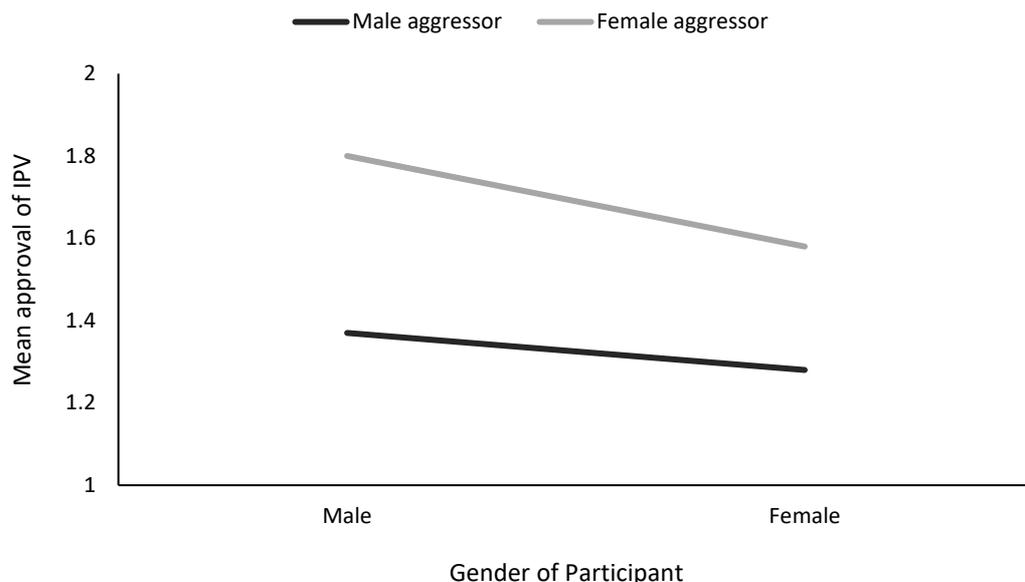


Figure 8. Mean approval of male and female violence for male and female participants (N = 511).

In order to unpack this two-way interaction, post hoc ANOVAs and Bonferroni adjusted comparisons were computed. First, two one-way univariate post hoc ANOVAs were computed to examine within gender differences for approval rates of violence by a male or a female. These results indicate that male participants approved of female IPV significantly more than they approved of male IPV, $F(1, 212) = 209.15, p < .001, \eta_p^2 = .50$. Furthermore, female participants also approved of female IPV significantly more than they approved of male IPV, $F(1, 297) = 171.99, p < .001, \eta_p^2 = .37$. Both of these effect sizes are large. Second, two one-way univariate ANOVAs were computed to examine between gender differences in the approval of male and female violence. Results indicate that male participants approved of male violence significantly more than female participants, $F(1, 509) = 6.48, p = .011, \eta_p^2 = .01$. Additionally, male participants approved of female violence significantly more than female participants, $F(1, 509) = 21.83, p < .001, \eta_p^2 = .04$. Both of these effects were small which indicates that men and women likely have comparable approval levels for male and female violence.

The three-way interaction between typology group, the gender of aggressor, and the gender of participant was non-significant with a small effect size, $F(2, 505) = 2.81, p = .061, \eta_p^2 = .01$. This result signifies that male (Figure 9) and female (Figure 10) participants have a similar pattern of approval for IPV perpetrated by men and women, regardless of their group status.

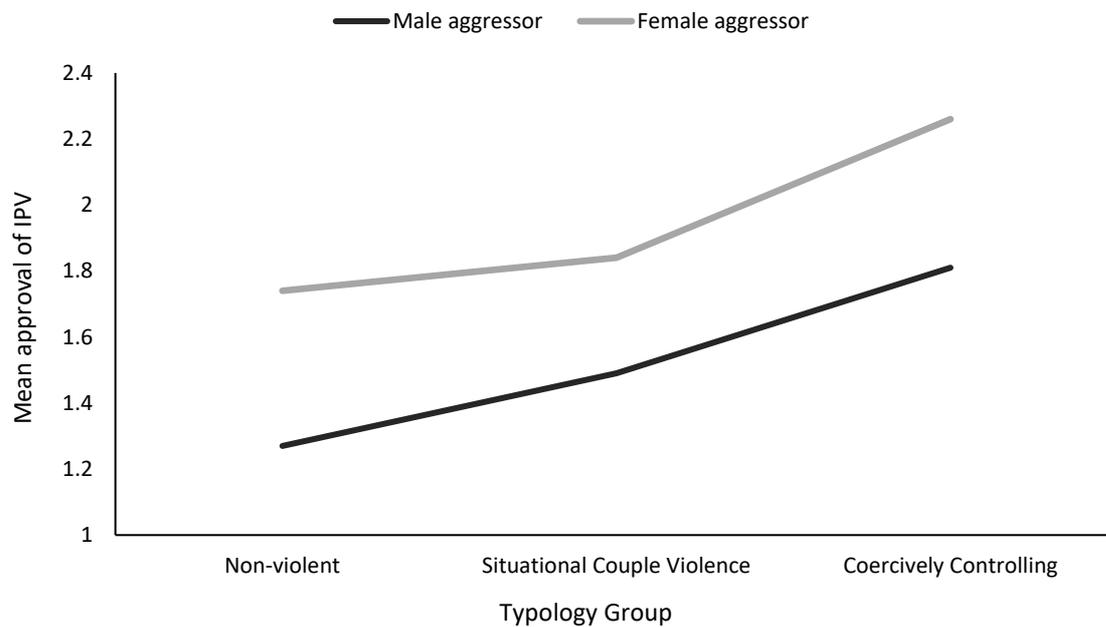


Figure 9. Mean approval of male and female IPV by typology group for male participants (n = 213).

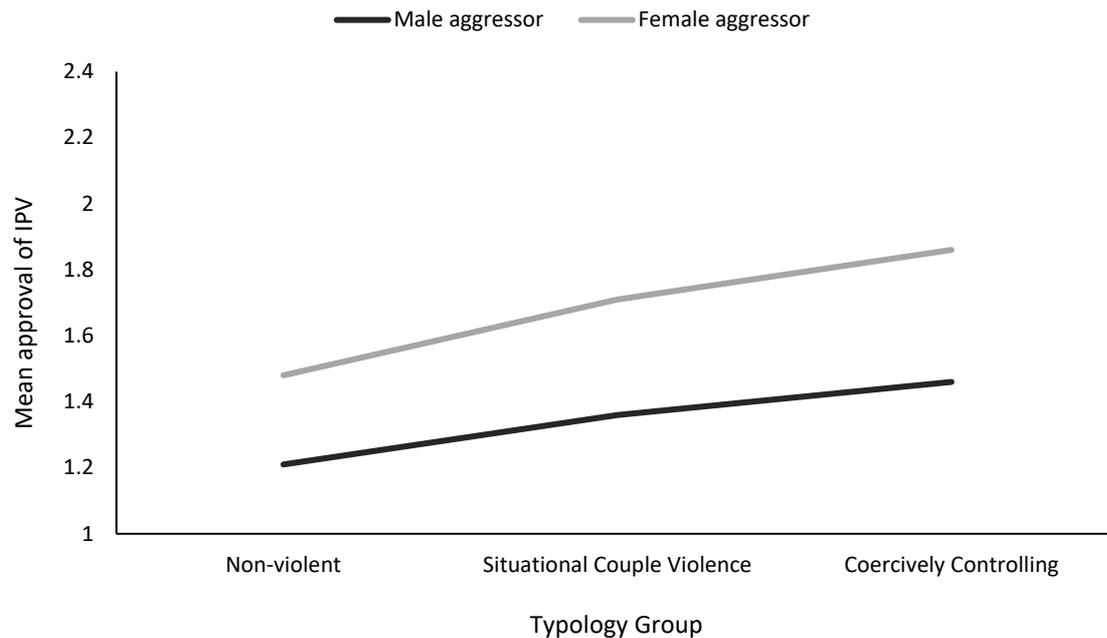


Figure 10. Mean approval of male and female IPV by typology group for female participants (n = 298).

In order to unpack the three-way interaction, post hoc ANOVAs and Bonferroni adjusted comparisons were computed. First, in order to examine whether male and female participants in each category approved of male or female IPV differently, six post hoc one-way repeated measures ANOVAs were computed. These results indicate that all participants approved of female violence significantly more than male violence (coercively controlling male participants; $F(1, 15) = 17.09, p = .001, \eta_p^2 = .53$; coercively controlling female participants; $F(1, 22) = 22.35, p < .001, \eta_p^2 = .50$; SCV male participants; $F(1, 57) = 47.39, p < .001, \eta_p^2 = .45$; SCV female participants; $F(1, 91) = 55.65, p < .001, \eta_p^2 = .38$; non-violent male participants; $F(1, 137) = 145.29, p = .001, \eta_p^2 = .51$, and non-violent female participants; $F(1, 182) = 97.04, p < .001, \eta_p^2 = .35$). All of these effect sizes are large.

Second, in order to examine within gender differences in the approval of male violence between groups, two one-way univariate post hoc ANOVAs were computed. Results indicate that male participants approved of male violence differently depending on which

typology group they were classified as with a moderate effect, $F(2, 210) = 20.07, p < .001, \eta_p^2 = .16$. Female participants also approved of male violence differently depending on which typology group they were classified as, $F(2, 295) = 6.15, p = .002, \eta_p^2 = .04$, however, the effect was small which indicates that the differences are likely to be minimal. Bonferroni adjusted pairwise comparisons found that coercively controlling, and SCV male participants approved of male violence more than non-violent males. Additionally, coercively controlling male participants approved of male violence more than SCV males. Comparatively, coercively controlling and SCV female participants approved of male violence more than non-violent females. No other significant differences were found.

Finally, two one-way univariate ANOVAs were computed to examine within gender differences in the approval of female violence between groups. Results indicate that participants approved of female violence differently depending on which group they were classified into (male participants; $F(2, 210) = 7.76, p = .001, \eta_p^2 = .07$, and female participants; $F(2, 295) = 9.61, p < .001, \eta_p^2 = .06$). Both of these effect sizes are small indicating that men and women approved of female IPV similarly regardless of which group they were classified as. Bonferroni adjusted pairwise comparisons indicate that coercively controlling male participants approved of female violence more than SCV and non-violent males. Comparatively, coercively controlling, and SCV females approved of female violence more than non-violent females. No other significant differences were found. See Table 16 for all Bonferroni comparisons relating to male participants, and Table 17 for all Bonferroni comparisons relating to female participants.

Table 16

Mean differences in approval of physical violence for male participants classified using Johnson's typology

Male aggressor							Female aggressor						
Typology category (I)	Typology category (J)	Mean diff (I-J)	SE	95% CI		Sig	Typology category (I)	Typology category (J)	Mean diff (I-J)	SE	95% CI		Sig
				Lower	Upper						Lower	Upper	
NV	SCV	-0.21	0.06	-0.35	-0.08	.001**	NV	SCV	-0.11	0.08	-0.30	0.09	.550
	CC	-0.54	1.00	-0.77	-0.31	<.001**		CC	-0.53	0.14	-0.85	-0.20	<.001**
SCV	CC	-0.33	0.10	-0.57	0.08	.005*	SCV	CC	-0.42	0.15	-0.77	-0.07	.013*

Note. NV = Non-violent. SCV = Situational Couple Violence. CC = Coercively Controlling.

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

Table 17

Mean differences in approval of physical violence for female participants classified using Johnson's typology

Male aggressor							Female aggressor						
Typology category (I)	Typology category (J)	Mean diff (I-J)	SE	95% CI		Sig	Typology category (I)	Typology category (J)	Mean diff (I-J)	SE	95% CI		Sig
				Lower	Upper						Lower	Upper	
NV	SCV	-0.15	0.05	-.279	-.017	.020*	Non-violent	SCV	-0.23	0.07	-0.04	-0.06	.002*
	CC	-0.25	0.09	-.48	.027	.023*		CC	-0.39	0.12	-0.74	-0.03	.003*
SCV	CC	-0.11	1.00	-.34	.134	.872	SCV	CC	-0.15	0.12	-0.53	0.22	.648

Note. NV = Non-violent. SCV = Situational Couple Violence. CC = Coercively Controlling.

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

Discussion

This thesis provides a test of the gendered theory of IPV. It aimed to examine the approval ratings of violence between the sexes in a New Zealand student sample, and the relationship of this approval with perpetration of controlling behaviours and physical violence in intimate relationships. Four research questions were examined, each of which is described below alongside a summary of findings. The implications of the research for practice and policy are then discussed.

Summary of results

Question One. This question set out to explore the nature and prevalence of different conflict tactics used within the sample during relationship conflict. The prevalence of conflict tactics and controlling behaviours in this study augments the findings of numerous studies that have highlighted that men and women engage in IPV at similar frequencies (Archer, 2000, 2006; Straus & Gelles, 1986). In the current study, 10.7% of women and 5.6% of men reported perpetrating severe physical assault. This is comparable to international literature. For example, Straus (2004) measured the rates of severe physical assault and injury in 31 universities internationally and found that perpetration rates for severe physical assault ranged from 1.5 to 21.2% for men, and 3.0 to 25.8% for women. In terms of injury, the current study found that 1.9% of men and 4.0% of women inflicted minor injuries. Additionally, 0.5% of men and zero women inflicted severe injuries. Comparatively, Straus (2004) reported perpetration rates of severe injury ranging from zero to 8.7% for men and zero to 13.9% for women. These results challenge the gendered theory's argument that *if* females engage in serious violence, their violence will not cause severe injuries (Dobash & Dobash, 2004). Thus, this thesis highlights that addressing IPV perpetrated by men and women is paramount, and the prevention of both should be considered equally important.

Bivariate analyses highlighted that men and women are equally violent, with most of the conflict resolution tactics being perpetrated and experienced at equal rates by male and female participants, however, there were some crucial differences. First, male students perpetrated more minor sexual coercion than female students. This is consistent with previous literature such as Chan, Straus, Brownridge, Tiwari, and Leung (2008) who collected data from 22 universities internationally, and reported that 20 of the universities had higher rates of men engaging in sexually coercive behaviour than females. Second, the present study found that men experienced more severe physical assault than they perpetrated, that females perpetrated more minor physical assault than they experienced, and that females perpetrated more severe physical assault than males. Similar results have been found by Straus (2004) who reported that female students were engaging in more severe physical assault than male students in 24 of the 31 universities examined. Third, female students in the current study perpetrated more minor psychological abuse than male students. This is comparable to the findings of Bates et al. (2014) that women were more physically and verbally aggressive than men. These results highlight that female students can perpetrate as many violent behaviours, if not more, than male students within a relationship. Despite these differences, all effect sizes were small which indicates that men and women likely use conflict tactics as often as they experience them. These results also highlight the reciprocal nature of IPV due to the fact that participants were both perpetrating and experiencing partner violence in their relationships.

Finally, the current study found that men and women engaged in a similar amount of controlling behaviours with two small differences: (a) female students employed more threats than male students, and (b) male students experienced more isolating behaviours than female students. This trend for both men and women to engage in controlling behaviours is present in the literature. For example, Bates et al. (2014) demonstrated that women perpetrated

significantly more controlling behaviours than men. Additionally, the authors found that men and women in their study reported that their partners were perpetrating as many controlling behaviours as they were. These results refute the gendered theory's notion that men seek to control their partners to a greater degree than women, and thus also refutes the gendered theory's argument that female IPV is enacted without a control motive, while male enacted IPV is primarily used in the context of control (Dobash & Dobash, 2004; Dobash et al., 1992). Therefore, while control can be an important factor to consider in IPV research, control *should not* be conceptualised as a factor that is exclusive to men.

Question Two. This question set out to explore the collective approval rate of any physical IPV perpetrated by the different sexes under different levels of provocation. Although participants' approval for this question was low (ranging from 1.03 to 2.26 on a scale from one to five), these ratings did reveal significant associations. Results indicate that the type of provocation shown altered participants' approval of IPV with a large effect. When no provocation was used, participants did not approve of IPV whatsoever, however, infidelity and physical violence preceding IPV increased approval. This means that provocation, or the context in which violence occurs, has a significant impact on approval, and therefore should not be ignored. For example, in treatment programmes, it is important to generalise non-violent skills to a variety of situations (Sanders, Markei-Dadds, & Turner, 2004), and IPV treatment should adhere to the same concept. Furthermore, participants in the current study were most approving of violence when the perpetrator was physically provoked. This is consistent with previous research which has shown that individuals are more accepting of IPV if they believe a perpetrator has been provoked, especially for physical assault (Dempsey, 2013; Harris & Cook, 1994; Robertson & Murachver, 2009). This is important as it demonstrates an awareness of how the actions of both partners can contribute to the situation and provides an explanation for the high rates of reciprocal violence. Indeed, there

is research indicating that reciprocal violence is the most common type of IPV (Archer, 2000; Bowen, 2009; Stewart, Gabora, Allegri, & Slavin-Stewart, 2014). Moreover, research has demonstrated that one's own use of physical violence is a potential risk factor for one's own victimisation (Stith et al., 2004). Thus, there is a need to address the fact that individuals approve of responding to violence with more violence. Interventions could focus on developing strategies to help keep individuals safe that do not involve aggressing back against a partner in anger. For example, interventions could teach couples how to recognise the onset of symptoms associated with themselves and their partner becoming angry, and promote the use of a negotiated timeout system to enable both partners to calm down and relax before attempting to communicate again (Stith, McCollum, & Rosen, 2011).

This analysis also found that the gender of the aggressor had a significant impact on approval. Participants approved of female violence more than they approved of male violence when the aggressor had been provoked (infidelity or physical violence) with large effects. These results are consistent with previous research which has demonstrated that individuals approve of female violence more than male violence (Sorenson & Taylor, 2005), that university students view male violence in a negative light (Feld & Felson, 2008; Hammock et al., 2017), and that university students have low approval of partner violence in general (Spencer, Morgan, Bridges, Washburn-Busk, & Stith, 2017). The fact that the current sample approved of female violence more than male violence indicates that students hold chivalrous normative beliefs, which does not support the gendered theory's view that individuals in Western society have internalised patriarchal values. This chivalrous normative belief appears to chastise men for being violent towards their female partners irrespective of the situation while simultaneously espousing that there are circumstances in which (a) men deserve to be aggressed against by their female partner (Robertson & Murachver, 2009), and (b) that the behaviour of the male justifies their female partner's use of violence. This

benevolent sexism can help to explain why male perpetrated violence is reported more often than female perpetration, and highlights one reason why Western society has been resistant to acknowledge female perpetrated violence as a significant societal concern. Moreover, since personal normative beliefs are typically related to the beliefs prevalent in society (Huesmann & Guerra, 1997), this indicates that Western societies in general *may* endorse chivalrous beliefs. Indeed, research such as the work of Feld and Felson (2008) has indicated similar findings in representative community samples. Despite this, conclusions should be tentative as it is possible for individual normative beliefs to differ from the societal norm (Ireland, 2009). Therefore it is important to explore the beliefs of violent individuals within the collective sample. Individuals can hold a particular belief about violence in relationships (i.e., chivalry), then act in a manner that is inconsistent with said belief. This is also supportive of the social information-processing model of aggressive behaviour (Huesmann, 1998) in which normative beliefs are one component that helps to regulate aggression.

Finally, the current study found that the gender of the participant did not have a significant impact on approval of IPV with a very small effect. This indicates that men and women have a similar pattern of IPV approval when considering both the context of a situation (provocation) as well as the gender of the aggressor. This finding does not support previous literature, although the trend was in the same direction as other research. For example, research has demonstrated that the gender of the participant is an important variable, with men approving of IPV significantly more than females (Cauffman, Feld, Jensen, & Arnett, 2000). The results of this thesis do not necessarily mean that the gender of the participant is unimportant, but rather that the gender of the participant may not contribute anything unique when combined with other variables such as provocation and gender of aggressor.

Question Three. This question set out to explore whether women and men who had used violence in their relationships differed in their approval ratings compared to non-violent individuals. Results found that although violent individuals held the same chivalrous approval patterns as the collective sample, they approved of male to female relationship violence significantly more than non-violent individuals with large effects. This was especially true for violent men who had the highest approval of male to female violence, and who also particularly approved of female violence. This is consistent with findings in other research (Stith et al., 2004). Despite this, previous findings were limited due to their focus on male perpetrators. The current research expands upon this literature with the inclusion of violent females, finding that violent men *and* violent women are more approving of male IPV and female IPV than non-violent individuals. This is a significant addition to the literature as (a) it augments the growing body of literature that is being conducted with violent females (Bowen, 2009; Stewart et al., 2014), and (b) it suggests that partner violent men and women may have similar chivalrous normative beliefs regarding relationship violence. Men who approve of female to male IPV may believe that male victimisation is warranted or that female violence is not abuse and therefore is a normal part of a relationship. Indeed, support for this viewpoint exists in the literature (Dixon & Graham-Kevan, 2011; Spencer et al., 2017). This trivialisation and rationalisation of female violence increases the risk of, and stigmatisation of male victims by indicating that they are responsible or partially responsible for their experiences. This in turn can lead to men not reporting their abuse, or prevent them from seeking help. Indeed, in a study examining men who had called the United States Domestic Abuse Helpline for Men, Hines, Brown, and Dunning (2007) reported that some men who did seek help were turned away by the service or were told that they had done something to cause their abuse. Attributing responsibility to men for their experiences removes the problematic nature of women's violence, and ignores the dynamic interactions

that exist between couples. This occurs despite research indicating that the interaction between both partners, and their environment is paramount in order to understand violent behaviour (Dixon & Graham-Kevan, 2011; Dobash et al., 1992). This research question also provides a platform to explore differences between violent and non-violent individuals further using Johnson's typology. The importance of this typology lies in its ability to examine differences between violent individuals with different levels of control.

Question Four A. This question aimed to examine the extent that the current sample could be classified using Johnson's typology. Results indicate that the typology was able to be replicated with the current sample. In his original analysis, Johnson (1999) classified 44.2% of violent individuals in his sample as SCV, 29.4% as CCV, 23.3% as VR, and 3.1% as MVC. Comparatively, this study classified more SCV (77.7%) and MVC (9.8%) relationships, and classified fewer CCV (10.4%) and VR (2.1%) relationships than Johnson. In terms of gender differences, Johnson (1999) found that those classified as CCV were predominantly male (97%), and those classified as VR were predominantly female (96%). He additionally found gender symmetry in the SCV (55.5% male, 44.5% female) and MVC groups (50% male and female). This study found that there was no significant difference in the frequency in which males and females were classified as MVC (52.6% male, 47.4% female) which broadly supports Johnson's claim of gender symmetry within this group. The current study was also able to classify males and females as SCV (61.3% female, 38.7% male) with significantly more females in this group. However, the effect was small which indicates that the difference is likely to be minimal: as such, this result broadly supports Johnson's proposition of gender symmetry within SCV. Whilst the current study found that the majority of participants classified as CCV were female ($n = 14$, 70%) and that the majority of VR participants were male ($n = 3$, 75%), there were no significant differences in frequency (i.e., men and women were as likely as each other to be classified as CCV, and

VR). This similarity does not support the findings by Johnson and colleagues (Johnson, 1999; Johnson & Ferraro, 2000; Johnson & Leone, 2005) that CCV and VR are gendered types of violence indicative of male control. Additionally, the fact that a significant proportion of individuals in this study (20%) were involved in violent relationships in which coercive control was prevalent does not support the argument of Johnson (2005) that surveys with non-clinical populations will primarily identify SCV. As Graham-Kevan and Archer (2003a) stress, while SCV may be more prevalent in non-clinical samples, Johnson's (2005) assertion about the extent to which this occurs is overstated.

The results of this study, discussed above, also support findings by other researchers who have replicated the typology, and demonstrated that CCV individuals can be male and female, and can be found in general or student populations in substantial numbers (Bates et al., 2014; Graham-Kevan & Archer, 2003a; LaRoche, 2008). Specifically, this study classified a similar percentage of CCV individuals compared to Bates et al. (2014) (10.4% compared to 10%), and classified fewer CCV individuals than Graham-Kevan and Archer (2003a) who classified 22.2%. This study also classified a higher percentage of SCV individuals (77.7%) and lower percentage of VR individuals (2.1%) than Bates et al. (2014) and Graham-Kevan and Archer (2003a) who classified 50% and 58.6% of their respective samples as SCV, and 9% and 12.6% of their respective samples as VR. Finally, this study classified a lower percentage of MVC individuals (9.8%) than Bates et al. (2014) who classified 31%, but classified a higher percentage of MVC individuals than Graham-Kevan and Archer (2003a) who classified 6.7%.

The results of the current study imply then, that Johnson was correct to assume that control can be a beneficial variable in which to categorise partner violent individuals with, however, he was incorrect to assume that women would not be included in the CCV group. While the above findings are pertinent, it should be noted that in the current study the

majority of the sample were involved in non-violent or SCV relationships, and thus, a limited number were able to be classified as CCV, VR or MVC. However, due to the potential for severe violence, and the reciprocity of violence in SCV relationships, this thesis argues that it is important to intervene with this type of violence especially since it is what the majority of individuals are experiencing.

Question Four B. This question set out to examine the relationship between the strength of the dominant collective belief and Johnson's (1999) typology. As little research has examined Johnson's couple typology with risk markers from different levels of a nested ecological model, this study was the first to examine the normative beliefs of individuals classified using the typology. This is a beneficial addition to the literature as normative beliefs have been shown to mediate/regulate the enactment of violent behaviour (Huesmann, 1998; Huesmann & Guerra, 1997). Thus, if highly controlling and violent individuals believe IPV is acceptable they may be more likely to engage in violent behaviour. Results indicate that all participants approved of female violence significantly more than male violence regardless of group status with large effects. Results also found that coercively controlling male participants approved of male and female violence significantly more than SCV males, and non-violent controls. However, female coercively controlling and SCV groups did not significantly differ. It is possible that control had less of an impact on approval for women than their actual use of violence. Alternatively, the measure that identifies control may be more sensitive to identifying control in men than women. This may be particularly true of the CBS-R as it was developed from the Duluth programmes of work (Graham-Kevan & Archer, 2005). It is important to note that since all violent individuals were significantly more approving of male and female violence than non-violent individuals, and that all participants (violent and non-violent) seem to hold a chivalrous pattern of beliefs as first indicated in Question Two: treatment should address individual's approval of their own violence, as well

as their approval of their partner's violence. Doing this may also help to address the high rates of reciprocal violence that were present in this study, and in other representative community surveys (Straus & Gelles, 1986).

Finally, the above results denote that even though coercively controlling men do approve of male violence more than SCV men, each typology group also approved of female violence significantly more than male violence with large effects. It is therefore unlikely that sexism is driving the behaviour of coercively controlling men. If it was, one would expect coercively controlling men to approve of male violence significantly more than female violence. Thus, although coercively controlling men appear to be unique in their levels of approval compared to other groups of men, this finding cannot be taken as support for the gendered theory. Further research needs to explore the aetiology of IPV of individuals with high levels of controlling behaviours, and ensure that measures are sensitive to gender differences in order to identify valid and reliable groups of offenders. For example, these differences could be due to multiple interconnected social, personal, and developmental factors which supports research by Dutton (2006). The findings of this thesis highlight the need for explanations that go beyond the gendered theory's suggestions of sexism/patriarchy as the primary drivers of male to female IPV.

Implications for Policy and Practice

This thesis contributes to the body of literature that has highlighted the tenuous evidence of patriarchal values as the sole, or most important factor contributing to the aetiology of IPV. Despite such research findings, the gendered theory arguably still has the largest impact on the development of tertiary and primary prevention strategies. Tertiary prevention refers to services provided to individuals who have already experienced, or are currently experiencing IPV, and aims to reduce repeat offending (Dixon & Graham-Kevan, 2011). On the other hand, primary prevention strategies aim to avert instances of IPV

occurring in the entire population (Dixon & Graham-Kevan, 2011). The gendered approach allowed for IPV to be in the forefront of public consciousness. Nevertheless, it limits the amount of support being provided to male victims, female perpetrators, couples in mutually violent relationships, couples in same-sex relationships, and children who witness IPV (Dempsey, 2013). While prevention strategies are being adapted and incorporating a gender inclusive approach, women are nevertheless the primary focus with men in a secondary position at best. For example, the New Zealand Ministry of Health's IPV intervention policy states that health practitioners should perform mandatory routine questioning of all females above the age of sixteen about physical, sexual and psychological abuse, and fear of current or former partner: conversely, males should be questioned only *if* they present with "signs and symptoms" that *could* indicate IPV (Fanslow & Kelly, 2016, p. 52). This distinction in practice has been argued to be due to the "differences in prevalence and severity of violence against men" (Fanslow & Kelly, 2016, p. 52). While a positive step towards gender inclusivity, this type of policy reinforces that male victims of IPV are less important to intervene with than female victims, and restricts the availability of services for these men.

Tertiary prevention. The two most prominent tertiary preventions in the IPV domain are cognitive behavioural therapy (CBT), and a gendered psychoeducational approach based on the Duluth model (Babcock, Green, & Robie, 2004). Both of these tertiary prevention programmes have been used separately and in combination, which has led to the distinction between the CBT and Duluth approaches being lost at a practical level (Banks, Kini, & Babcock, 2013; Dixon & Polashek, 2017). In this hybrid approach, group facilitators lead exercises designed to re-educate males about the patriarchal nature of their masculinity, with some cognitive-behavioural aspects (Dixon & Polashek, 2017). Thus, IPV interventions are exclusively designed for males, and are frequently implemented with men involved in the judicial system. However, the effectiveness of programmes based on patriarchal beliefs have

been challenged. For example, Babcock et al. (2004) conducted a meta-analysis of batterer interventions for adults, and found small effect sizes in recidivism for CBT and Duluth style programmes. Additionally, there is an abundance of literature showing that treatments targeting patriarchal beliefs have had little success (Radatz & Wright, 2016).

Dobash and Dobash (2004) state that while any conflict and violence between couples is regrettable, male perpetrated IPV is where the focus of services should remain.

Additionally, Johnson (2008) argues that effective tertiary interventions should adhere to the distinction between SCV and CCV, thus services should prioritise male CCV. However, even if tertiary preventions focus exclusively on CCV relationships, in their current form these interventions do not provide sufficient support for couples as they would address the male partner's violence, but would ignore any female perpetration or reciprocity of violence. As this study highlights, the majority of relationships involving coercive control had both partners engaging in violence (79.5% compared to 20.5% of CCV with non-violent partners). Additionally, the fact that the vast majority of violent females were not classified as VR does not support the gendered argument that female violence is primarily defensive in nature (Dobash & Dobash, 2004; Johnson, 2008). Therefore, singularly targeting CCV completely ignores the experiences of the vast majority of individuals. Ignoring SCV relationships (especially mutually violent ones) diminishes the problematic nature of this type of IPV by insinuating that it is normal and acceptable behaviour. Moreover, it minimises how dangerous SCV can be while simultaneously ignoring the increased risk of injuries for males *and* females in mutually violent relationships (Dixon & Graham-Kevan, 2011). This minimisation occurs despite researchers like Kelly and Johnson (2008) arguing that severe and injurious violence does transpire in SCV relationships. As such, the evidence provided in this thesis highlights the necessity for tertiary preventions to acknowledge and address reciprocal/mutual violence, and SCV, in addition to CCV by men *and* women. In other

words, tertiary prevention programmes should aim to reduce all types of IPV regardless of who the perpetrator is, and whether the violence causes injuries. This will be more beneficial than concentrating on CCV, and injurious behaviours (Dixon & Smith Slep, 2017).

Preventing the occurrence of IPV in general would reduce the number of individuals experiencing a broad range of partner violent behaviours of different severities, and frequencies (Dixon & Graham-Kevan, 2011).

Due to the focus of male perpetrators and female victims mentioned above, no interventions are specifically designed for partner violent females. Rather, treatments for women are adapted versions of the male psychoeducational programmes (Tutty, Babins-Wagner, & Rothery, 2017). However, it is not practical to take treatments created exclusively for males, and then apply them to females (Cortoni & Gannon, 2013). This is especially true for IPV as one would assume that using the gendered psychoeducational model to challenge perpetrators' patriarchal values would have little benefit for females. Instead, female specific programmes need to be developed based on research conducted with female offenders. King (2013) suggests that, in general, female offending can be addressed with programmes designed to adhere to the principles of the Risk-Needs-Responsivity model of criminal rehabilitation (RNR: Bonta & Andrews, 2016). The RNR principles emphasise that treatment should ensure that individuals receive suitable interventions that are delivered at an appropriate intensity, are designed to target an individuals' specific risk factors, and can account for individual differences (e.g., motivation, cognitive abilities, personalities, cultural background) while implementing the most effective treatment techniques (Banks et al., 2013). The majority of research on tertiary preventions for female offenders is transpiring in the sexual offending field. Cortoni and Gannon (2013) provide evidence that RNR programmes are effective for female sex offenders, however, any interventions used should be able to account for the fact that the treatment needs of females can be quite different from

males (i.e., different risk factors or risk factors presenting differently), and that gender differences are likely to impact on therapy engagement. Extrapolating these findings to the IPV domain would suggest that RNR based interventions could be implemented effectively with partner violent men and women. Indeed, RNR-based programmes for IPV perpetrators are being developed (Banks et al., 2013), and there is tentative evidence for their effectiveness (Dixon & Polashek, 2017). Whilst a promising step, these programmes are currently being developed with partner violent males, and so would also need to be specifically developed for women.

There is also a distinct lack of tertiary preventions available for student populations despite the high prevalence of IPV amongst this population (Mcdermott & Lopez, 2013). A gendered psychoeducational approach has not been implemented with university students: hence, there is no research investigating whether such an intervention would be beneficial for students. Nonetheless, this thesis highlights that chivalrous normative beliefs, not patriarchal beliefs, seem to be prevalent amongst university students. Therefore, it is unlikely that gendered interventions in their current form would be effective for student populations, although an educational intervention focusing on coercive control and dominance may be beneficial for some individuals (Dixon & Polashek, 2017). Student specific tertiary preventions should address personal and situational risk factors that are relevant for males and females, rather than adhering to a gendered philosophy in the absence of empirical evidence of that philosophy's superior efficacy. For example, interventions could target normative beliefs concerning approval of violence in general, or antisocial cognitions which will be more effective than targeting beliefs pertaining to male dominance (Dixon & Polashek, 2017; Radatz & Wright, 2016). Nested ecological models (Dutton, 2006) or typologies (Holtzworth-Munroe & Stuart, 1994; Johnson, 2008) are potential tools to help

design multifactorial tertiary preventions and incorporate a broad range of risk factors from an individuals' socio-psychological environment to guide treatment.

Primary prevention. While tertiary prevention programmes are essential, primary prevention strategies aimed at preventing partner violence happening in the wider population are also necessary. Indeed, Dixon and Graham-Kevan (2011) stress the importance of primary prevention campaigns that target, and are able to be accessed, by the whole population. To do this effectively, primary prevention campaigns need to reflect what the majority of individuals are experiencing. As highlighted by this thesis, the message portrayed would need to focus on emphasising that male to female IPV *and* female to male IPV is a serious problem, and that any instance of relationship violence is unacceptable. Indeed, targeting low and severe levels of violence by men and women may serve to increase awareness that any violence in a relationship is unacceptable (Dixon & Graham-Kevan, 2011). Some gender inclusive prevention programmes have begun to be developed. One example of a programme developed specifically for student populations is the Clark Anti-Violence Education (CAVE) programme at Clark University in Massachusetts, USA. The programme is a series of mandatory educational modules completed by students prior to arrival on campus, during the first week of term, and a few weeks into the term (Clark University, n.d). These modules concentrate on stalking and harassment, defining/using consent, the impact of being an active bystander, and challenging beliefs that support and facilitate dating violence and sexual assault (Clark University, n.d). In New Zealand, universities are slowly beginning to acknowledge the problematic nature of IPV on campuses. The University of Auckland has a policy and supporting guidelines to provide "reasonable support" to staff and students experiencing domestic or relationship violence (University of Auckland, 2015). Such prevention policies and programmes are a positive move toward counteracting this social issue. However, universities across New Zealand

arguably need to be more active in trying to prevent the prevalence of IPV on campus which in turn could allow for the development of in-depth prevention initiatives on campuses.

Tertiary and primary prevention strategies are necessary given the high prevalence, and severity of IPV among university dating samples nationally and internationally. University campuses provide an advantageous opportunity for the implementation of primary prevention programmes aimed at reducing the number of individuals experiencing IPV.

Methodological Considerations

A limitation of the current study is that this was a cross-sectional design; thus, this study was unable to establish any causal effect normative beliefs have on approval of IPV, or actual experiences. It is also important to note that the sample used in this study were university students in heterosexual relationships which is not representative of the New Zealand population. Due to this, it is advised against generalising these findings to other populations such as non-students or individuals in same-sex relationships. Nonetheless, the results of this thesis may be appropriate for students on other New Zealand university campuses or for international universities. To overcome these limitations, future research could adopt qualitative, longitudinal and/or mixed methods designs, and could consider testing the control typology with a representative community based New Zealand sample. Additionally, future research could also investigate whether individuals with different sexual orientations approve of violence and use of controlling behaviours differently, since this study was restricted to heterosexual individuals.

Another possible issue to be aware of with this study is that data for both partners was obtained from a self-report questionnaire. Research has suggested that self-reports generate biases such as social desirability which lead to the underreporting of male to female IPV (Dobash & Dobash, 2004). Conversely, it has been argued that men tend to underreport their victimisation in dating situations (Spencer et al., 2017), and that men and women underreport

their own perpetration and/or over report their partner's violence (Archer, 2000; Dixon & Graham-Kevan, 2011). At the present time, there is no clear consensus about whether one gender underreports more than the other, or if one gender is more reliable in their reporting (Chan, 2011). Thus, it is always possible that a respondent may be reducing the impact of their behaviour, or embellishing their experiences. Despite these concerns, it has been argued that anonymous self-report measures for IPV have a higher disclosure rate than other measures in the field (O'Leary & Murphy, 1992), and that the effects of social desirability can be diminished by using Likert scales (Sorenson & Taylor, 2005). Data in the current study was also collected from a single member of a relationship. While data obtained from both partners does allow for greater reliability of responses, especially for socially undesirable behaviours (Esquivel-Santoveña & Dixon, 2012), the current study does allow for cross-validation of data to some degree due to asking participants about their own, and their partners, perpetration. Couples do not always present with a clear dichotomy of perpetrator and victim (Dixon & Graham-Kevan, 2011); thus, asking males and females about their perpetration and their victimisation allows for some details of the relationship context to be examined.

Finally, while the findings of this thesis are consistent with previous literature concerning approval of IPV amongst students (Sorenson & Taylor, 2005; Spencer et al., 2017), this study used the BaRAS, a measure designed specially to assess beliefs in a neutral and controlled context. Previous studies examining approval of IPV have used different measures: for example, Spencer et al. (2017) used an adapted version of the Wife Beating is Justified subscale from the Inventory of Beliefs About Wife Beating Scale created by Saunders, Lynch, Grayson, and Linz (1987). While this is a validated measure, using an instrument like this, which is based on violence in marital relationships, is unlikely to be appropriate for a student dating sample, especially since the majority of students are in dating

or co-habiting non-married relationships. Comparatively, the BaRAS is able to assess gender inclusive beliefs about relationship violence in a neutral context. Moreover, the current study contributes to the research highlighting the excellent internal reliability of the BaRAS, and its individual subscales (Esquivel-Santoveña, 2012; Griffiths, 2013).

Conclusion

This thesis demonstrated that IPV is an issue that affects a significant number of male and female New Zealand university students, and highlights that collectively, students do not hold patriarchal normative beliefs about the acceptability of IPV. Male and female participants were able to be classified using a control based typology developed by Johnson (1995, 1999) with a significant number of students involved in violent relationships characterised by high levels of coercive control. Finally, this thesis is the first to examine whether approval of IPV differed between individuals classified using a control based typology. Results indicate that the relationship between approval of IPV and control is complex as control seems to be important for some individuals (roughly for one in five individuals in this study), but is less important for others. This emphasises that motivations to be violent in a relationship can vary, and also that control as a motivation is not exclusive to men. Thus, interventions need to be specifically developed for all types of violence in order to account for different forms of IPV, such as female perpetrated violence, and student dating violence. Furthermore, violent relationships involving low control should not be ignored, and warrant tertiary preventions, especially since this type of violence can be severe/injurious, and is experienced by the majority of individuals.

Taken together, this thesis emphasises the necessity for a gender inclusive conceptualisation of IPV. Moreover, this thesis acknowledges that IPV is a complex phenomenon that cannot be adequately explained via a single factor approach. Therefore, theory, policy, and preventions should incorporate multifactorial methodology in order to

account for the heterogeneity of individuals involved in IPV. Furthermore, female to male partner violence needs to be acknowledged as a societal concern worthy of intervention in order for professionals and researchers to understand the complexities of IPV, and to be able to provide support for all individuals experiencing, or perpetrating intimate partner violence.

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Appendices



Appendix A: Information and Consent sheet

Experiences and Perceptions of Aggression in Intimate Relationships

Information and consent sheet: Project # 22554

Louise Dixon, Reader
Email: Louise.Dixon@vuw.ac.nz
Phone: +64 4 463 6548

Ryan Jones
Email: ryan.jones@vuw.ac.nz

Thank you for your interest in this project. Please read this information before deciding whether or not to take part. If you decide to participate, thank you. If you decide not to take part, thank you for considering my request.

Who are we?

Louise Dixon is a Reader/Associate Professor in Forensic Psychology at Victoria University of Wellington. She is the lead researcher on this project. Ryan Jones is studying his Masters in Forensic Psychology at Victoria University of Wellington, and is conducting this project under Louise Dixon's supervision for his thesis.

What is the aim of the project?

This study investigates how people manage conflict, and view the use of aggression between intimate or dating partners. To be eligible to take part in this study, you must be at least 17 years old and have been in a dating/intimate relationship that has lasted for at least one month at some point in your adolescent/adult life.

This research has been approved by the School of Psychology Human Ethics Committee under delegated authority of Victoria University of Wellington's Human Ethics Committee [project # 2254].

What is involved if I agree to participate?

If you agree to take part, you will complete the questionnaire online. You will be asked to answer questions about how you solve conflict, and whether you have experienced aggression or control in your past and current relationships. In addition, you will be asked to read short scenarios which describe partners aggressing against each other and to comment on which behaviours you think are acceptable.

It will take you approximately 45-60 minutes to complete. It is important that any information received is accurate. I therefore ask you to complete the questionnaire in a private, quiet space, consider each question carefully and answer each question honestly.

There are six sections to the questionnaire. The first asks for general demographic information. The second asks you to consider ways in which you may have solved conflict in your relationships. For example, questions will ask if you have ever done any of the following to a partner or if a partner has done this to you: showed them care; showed respect; punched or kicked; used a knife or gun; used force to have sex. The third and fourth sections ask you about how you may have acted towards your partner in certain situations. The fifth asks you to consider and comment on a series of hypothetical scenarios where aggression arises within a couple. Aggressive acts are briefly described here; for example, it may say 'Carol punched him repeatedly in the face'. The sixth and final section asks you to think about how you might behave in hypothetical situations with your partner in the future.

You will receive one research credit for taking part in this study. You will receive credit upon completion of the survey.

You must complete all six sections in one sitting, as you cannot resume from where you left off at another point in time. While you are participating, your responses will be stored in a temporary holding area as you move through the sections, but they will not be permanently saved until you complete all sections and you are given a chance to review your responses. You can stop participating in this study at any time, without giving a reason, up until you submit your completed questionnaire. If you choose to withdraw from the study before submitting your responses, your data will not be saved. You will only receive the credits if you chose to complete the study and submit your responses.

Privacy and Confidentiality

To protect your privacy, a randomly generated number that does not identify you will automatically represent all the information you provide. Your names or other identifying information will not be stored alongside your responses. This means that individual feedback on your responses will not be provided, however, if you desire, you can request a summary of aggregate results, after 11 November 2017, by contacting me using the details stated above.

Your de-identified data will be kept indefinitely by the research lead. It will definitely be kept for at least 5 years by the lead researcher after this research is published.

What happens to the information that you provide?

The responses you provide will be collected and combined with other participants' responses. We will then analyse the data, and look at overall patterns of responses. The results will be written up in the form of scholarly articles or presentations where we will talk about the general pattern of results. The lead researcher may also use your data in other related projects, and share it with competent professionals. When any of these things occur - data is shared, results are described, articles are written, or scientific presentations are given - it will be impossible for anyone to identify you.

If you have any questions or problems, whom can you contact?

If you have any questions about this study, either now or in the future, please feel free to contact me using the details stated at the top of this information document.

If you wish to discuss issues around aggression in relationships with someone, there are many avenues of free support, such as:

- The Samaritans (0800 726 666);
- The Family Violence Information Line (0800 456 450);
- Lifeline Aotearoa (0800 543 354);
- Youthline (0800 376633);
- Victoria Student Counselling Services (Appointments and general enquiries: Kelburn and Te Aro campus: 04-463 5310; Pipitea campus: 04-463 7474).

Thank you for considering participating in this research.

Consent to Participate

I have read and understood the information about this research project. I understand the purpose of this research, what will happen if I participate, and what will happen to the information I provide. I understand the measures that have been put in place to protect my privacy and confidentiality. For example, I understand that a randomly generated number, that does not identify me, will represent the information I provide. I understand that I can withdraw my consent at any time prior to submitting the questionnaire online without providing a reason.

I agree to participate in this research, and I understand that checking the box below indicates my consent.

If you do not agree to participate in this research, please exit this browser window now.

Yes, I agree to participate in this research.



Appendix B: Debriefing sheet

Experiences and Perceptions of Aggression in Intimate Relationships

Debriefing Statement: Project # 2254

Louise Dixon, Reader
Email: Louise.Dixon@vuw.ac.nz
Phone: +64 4 463 6548

Ryan Jones
Email: ryan.jones@vuw.ac.nz

Thank you for participating in this research study. **Please ensure you click the 'next' button at the bottom of this page to receive your credit.**

The research literature that examines aggressive behaviour in general shows that individual's who think aggression is an acceptable behaviour are at an increased likelihood of carrying out aggressive actions. This has allowed intervention programmes aimed at changing aggressor's hostile cognition, which in turn reduces incidents of aggression, to be developed. However, despite family violence being the the most common form of violent crime, this finding has rarely been explored for aggression between intimate partners, and certainly not for women who aggress against their partner. As a result, interventions do not know what belief systems to target in order to change aggressive behaviour in men and women who aggress against their intimate partner.

This study aimed to address this gap in the literature using a correlational design. It first set out to explore what student's beliefs about the acceptability of aggression to men and women in heterosexual relationships are. Next, it sought to explore if the resulting beliefs were associated with an increased likelihood of aggression to a partner. It is expected that the more acceptable men and women believe it is to hit people in relationships, the more likely they are to aggress against their partner.

Research with student populations in the area of partner violence is highly beneficial. There are high rates of dating violence in student and younger populations, and so professionals can learn a lot from research with you and your peers. Understanding the causes of aggressive and non-aggressive behaviour can help professionals to design interventions that prevent aggression in relationships. It therefore has great practical value, and your contribution is very important to preventing family violence.

If you have experienced or perpetrated relationship violence, or indeed if you find the contents of this questionnaire upsetting for some other reason and wish to discuss any issues about relationship aggression, there are many avenues of free support, such as:

- The Samaritans (0800 726 666)
- The Family Violence Information Line (0800 456 450)
- Lifeline Aotearoa (helpline: 0800 543 354)

- Youthline (0800 376633)
- Victoria student counselling services (Appointments and general enquiries: Kelburn and Te Aro campus': 04-463 5310; Pipitea campus: 04-463 7474).

If you would like to keep a copy of this debrief information for your future records; please take a screen shot and save it somewhere accessible to you now, and/or print a copy of this window now.

Should you have any further questions about the study, please feel welcome to contact us using the above contact details.

Thank you once again for your help.

Sincerely,

Dr Louise Dixon and Ryan Jones