

Exploring the patterns of intimate partner violence (IPV) and the utility of a rejection-abuse cycle model of IPV on a male and female Singapore prison sample

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Statement of Candidate

I certify that the work in this thesis entitled “Exploring the patterns of intimate partner violence (IPV) and the utility of a rejection-abuse cycle model of IPV on a male and female Singapore prison sample” has not previously been submitted for a degree nor has it been submitted as part of requirements for a degree at any other university or institution.

I also certify that the thesis is an original piece of research and that all data in this thesis was collected, analysed and presented by me. I certify that all sources of information have been appropriately acknowledged throughout the thesis.

The research presented in this thesis was approved by Macquarie University Human Research Ethics Committee, under the following number: 5201000949 on the 11th of February 2010.

Diane Chew Hsiao Yuan

3rd of January, 2014

THESIS SUMMARY

Intimate partner violence (IPV) research is concentrated in the West and in Asian societies as Singapore; there remains paucity in IPV research. Moreover, as IPV has traditionally been understood as male-on-female violence nested within patriarchy, majority of research has focused on understanding male whilst neglecting female perpetration. Such is the case even though there is substantive evidence that women perpetrate IPV at rates and severities comparable to men. For these reasons, this paper explored IPV from an attachment framework that cuts across both gender and culture. In particular, using the Revised Conflicts Tactics Scale and a variety of psychometric tests, this study surveyed 99 men and 96 women from a Singapore prison. Indeed, prisoners were chosen because 1) in Singapore, IPV had never been studied in this population, and 2) a high percentage of prisoners experience attachment impairments. Thereby increasing the relevance of studying IPV from an attachment framework.

Study 1 explored the rates and types of IPV perpetrated by men and women. Women self-reported higher rates of physical IPV perpetration and victimization than men; and both sexes were found perpetrate comparable amounts of controlling and non-controlling IPV. While results immediately suggest that women perpetrated (and hence possibly received) more IPV than men, and that controlling and non-controlling violence was perpetrated equally across sex; premature conclusions regarding gender must not be made because of the poor reliability of men's self-reported physical IPV perpetration and because although men and women generally matched on most demographic variables, some pre-existing differences were found between men and women in this sample.

Study 2 and 3 first explored the relationship between a range of variables (including insecure [avoidant and anxious] attachment, shame and alexithymia) and IPV perpetration by men and women respectively. Second, the variables of anxious attachment, shame, alexithymia and IPV perpetration were linked together to test the applicability of a circular

model of rejection-abuse. Different variables were found to underlie men and women's IPV perpetration. Furthermore, whilst partial support for the rejection-abuse model was found to fit with men's use of coercive control (a post-hoc measure of men's psychological IPV), the model did not fit well with any forms of women's IPV perpetration.

No doubt, being the first of its kind in Singapore, results from this study are preliminary and because of the specificity of the sample, cannot be generalized beyond this study. Results suggest that even though women and men both reported perpetrating controlling and non-controlling IPV, the underlying risk factors and motivation for IPV differ. Thus, it is likely that different models of IPV perpetration are needed to understand and treat male and female perpetration. Further to discussing the theoretical and practical implication of results, the limitations of the study are also recognised and suggestions for future research presented.

Keywords: intimate partner violence; typologies; attachment; Singapore; men; women; prisoners

CHAPTER 1
THESIS INTRODUCTION

Exploring the patterns of intimate partner violence (IPV) and the utility of a rejection-abuse cycle model of IPV on a male and female Singapore prison sample.

1.1 Introduction

Singapore is home to 5,312 400 people (Department of Statistics Singapore, 2012) inclusive of 74% Chinese, 13% Malays, 9.2% Indians and 3.3% of people from other ethnicities (Department of Statistics Singapore, 2010). Although culturally diverse, a deep-rooted Asian value collectively shared by Singaporeans is that the family is the “basic unit of society”. Furthermore, mirroring as well as shaping this societal value, several of Singapore’s legislations pertaining to domestic issues remain nested within this framework of belief (Singapore Government, 1991). When a family provides an environment of safety and love, family togetherness is nothing short of ideal. However, when the very people within one’s family are the source of danger, this ideal can leave members feeling trapped and ashamed for ever considering their own rights and protection. Unfortunately, in Singapore the latter situation, is likely the experience of many sufferers of ‘domestic violence’ or what is now known in the worldwide violence research field as ‘intimate partner violence’ (IPV).

IPV is defined as “physical, sexual or psychological harm by a current or former partner or spouse” that can occur between “heterosexual or same-sex couples and does not require sexual intimacy” (Centers for Disease Control and Prevention: CDC, 2013). IPV may differ in frequency and severity and occurs on a “continuum, ranging from one hit that may or may not impact the victim to chronic, severe battering (CDC, 2013). In Singapore, IPV is legally termed ‘family violence’ and involves willfully or knowingly placing, or attempting to place, a family member (that is a spouse or ex-spouse, child, parent, in-law or sibling) in fear or hurt; causing hurt, wrongful confinement or restraint against a family member’s will; or continual harassment which causes anguish. In this paper, the former definition will be used to define IPV particularly because it includes IPV between partners regardless of their marital

status and this study aims to explore IPV between spouses and non-spouses. In this paper, the terms physical and psychological harm, violence and aggression are used interchangeably to refer to IPV as defined by the CDC. Furthermore much of the research drawn upon to understand IPV in this paper comes from Western nations who define IPV in ways more compatible with CDC's definition.

To date, IPV research in Singapore remains scant in comparison to the vast pool of existing research from the West and the growing research from her Asian counterparts such as Hong Kong. At the time of writing, only approximately five studies exploring IPV were found from Singapore (Cheong & Bong, 2010; Choi & Edleson, 1995; Foo & Seow, 2005a; Foo & Seow, 2005b; Seow, Wong, Low, Anantharaman, Ooi, 1995). Nevertheless, IPV knows no cultural boundaries. In a large-scale population study, the National Intimate Partner and Sexual Violence Survey (NISVS) sampling 16,507 adults reported that 35.6% of women and 28.5% of men in the United States (U.S.) experienced IPV in their lifetime (Black et al., 2011). Correspondingly, within Asian communities, a survey on 607 Chinese, Korean, Vietnamese, Cambodians and South Asians from Massachusetts revealed that 38% and 33% of respondents knew a female victim of physical and psychological IPV respectively; and 12% knew a male victim of physical IPV (Yoshioka, Dang, Shewmangal, Chan, & Tan, 2000). It should be noted however that participants within this study were primarily immigrants. Thus, results may differ to that collected from countries of origin. Specific to research from Asia: A large-scale household study in Hong Kong utilized the revised Conflicts Tactics Scale (CTS2) to survey 5,049 respondents (Chan, 2005). It was found that 13.9% and 15.1% had ever been victims and perpetrators of physical IPV in their lifetimes respectively; whereas 7% and 8% were victims and perpetrators of physical IPV in the 12 months prior to the survey respectively; in India, the BBC News reported that about 70% of women were victims of IPV and that every 77 minutes, a death occurs in relation to dowry (BBC, 2006); and from selected population-based studies, the percentage of adult women who

were victims of IPV were 19-42%, 16%, 26-46%, 12-38%, 15-49%, and 20% from Bangladesh, Cambodia, India, Korea, Philippines, and Thailand respectively (Center for Health and Gender Equity, 1999). In Singapore, the International Violence Against Women Survey (IVAWS) (Cheong & Bong, 2010) sampled 2,006 women from the community and reported that compared to Australia, Hong Kong, Italy, the Philippines and Switzerland, Singapore had the lowest lifetime rates of: overall (9.2%), physical (6.8%) and sexual (4.2%) violence victimisation. No comparable statistics were available for male victims. Although these figures appear encouraging, readers are cautioned against interpreting them at face value. Alarming, the IVAWS reported that 71.1% of IPV incidents were not reported to authorities and a common reason cited was because victims did not want anyone to find out (Cheong & Bong, 2010). Additionally, when the Society Against Family Violence (SAFV, 2008) interviewed professionals, many resisted, and of those who cooperated, majority hesitated to offer firm opinions on IPV. Certainly, this insularity in Singapore is unsurprising for an Asian society. Nevertheless, it suggests that the true prevalence of IPV is likely higher than studies document. Thus, underscoring the urgent need for local research to demystify IPV for both Singaporean society and professionals alike.

No matter the prevalence, IPV has been associated with a myriad of risk factors. This includes chronic and profound mental and physical health issues, substance abuse, sexually transmitted diseases, pregnancy complications, and even death (Black et al., 2011; Campbell, 2002; Campbell, Baty, Laughon, & Woods, 2009; Coker, 2007; Plichta, 2004; Stark, 2007). Beyond impacting the victim, research has documented the link between children witnessing parental IPV and their experience of a range of emotional, behavioural, social, and adjustment problems (Carlson, 2000; Finkelhor, Ormrod, Turner, & Hamby, 2005; Suglia, Staudenmayer, Cohen, & Wright, 2010). Furthermore, at a societal level, victims require medical, crisis, housing, legal assistance, and often miss days off work (Black et al., 2011). Pertaining to Singapore, the IVAWS reported that 45.5% of women victims were injured; and of those

women, 28.9% required medical attention, 15.2% abused substances and 13.1% required help from agencies (Cheong & Bong, 2010). Moreover, a study from Singapore's Subordinate Courts (1998) interviewed 50 individuals attending counselling and reported that a substantial proportion of victims experienced fearfulness, anxiety, helplessness, confusion, low self-esteem and suicidal ideation. Children were also impacted 40% of the time, out of which 55% were threatened and 68% hurt during the conflict. Evidently, IPV not only impacts victims, but also devastates their families and society at large; and these associated risks cut across culture. For these reasons, this paper targets IPV in a Singapore context where research is limited. Hence, attention may be drawn to IPV either directly through a better understanding on the dynamics of IPV in Singapore or indirectly by creating interest in the topic and encouraging further research. In a country where information regarding IPV is directly adapted from the U.S -the current leaders in IPV research- there is much opportunity for local research to influence better-targeted IPV prevention and intervention. The discussion now introduces the aims of the paper.

1.2 Overview of the paper

Worldwide, societies have been shaped around patriarchal values and accordingly, the longstanding view of 'domestic violence' has been one of a powerful man dominating a powerless woman. No doubt, patriarchy encourages the worst forms of IPV by justifying sexual aggression and controlling violence against women (Peeks, 2006). In fact, as evidenced by extensive literature reviews, it is indisputable that women remain disproportionately hurt by IPV (Archer, 2000; Warner, 2010). Hence, in more traditional Asian societies where patriarchy reigns, the relevance of patriarchal motives underlying IPV perpetration must not be underestimated. Nevertheless, in the last decades, Western nations have significantly progressed in terms of gender equality, yet rates of IPV remain unexplainably high. This revolutionary change in society along with surfacing evidence of

women perpetrating IPV prompted researchers to question the relevance of framing IPV purely in terms of patriarchy. With time, more researchers began exploring gender equivalent forms of IPV (for example, reciprocal IPV between men and women and/or one-sided female to male perpetration). Undoubtedly, this shift in research was complex and IPV continues to carry with it a much-divided understanding amongst society and scholars. In most societies, including more gender equivalent Western nations, the traditionally patriarchal understanding of ‘domestic violence’ prevails. However, amongst scholars, two major ideologies have emerged that split the IPV field. On one side, *feminist* researchers retain the view of patriarchal, male-only perpetrated IPV. On the opposing side, a growing number of *family violence* researchers challenge this view and argue that IPV is as much a woman’s issue as it is a man’s. This ‘gender symmetry debate’ is the most fervently disputed topic amongst IPV researchers and has certainly been widely critiqued (e.g., Kimmel, 2002; Langhinrichsen-Rohling, 2009; Ross & Babcock, 2010). Even so, an overview remains fundamental to understanding IPV in the context of contemporary society. Thus, the first part of this paper documents the progression of the gender symmetry debate and explores the reasons it continues to influence after close to four decades. This discussion is then tied in to gendered issues within a Singapore context and the complexities it brings to studying IPV there.

Albeit relevant, it is important not to so get caught up in the gender symmetry debate that progress in understanding the aetiology of IPV is hindered. In light of the traditional view of IPV, much research has centred on understanding IPV as a manifestation of patriarchal values condoned by society. Consequently, the dominant intervention framework in the U.S. (Babcock, Green & Robie, 2004) as well as in countries such as Singapore that follow suit, focus treatment on issues of power and control. Nonetheless, with advancements in research, the CDC now utilizes a four-level social-ecological model that takes into consideration the complex relationships between individual, relationship, community and societal factors that may increase the chances of both becoming a perpetrator as well as victim (CDC, 2012).

Further, social learning models draw upon learning theories that propose that intergenerational transmission of IPV patterns occur when children observe and learn their parents communicate and model abusive behaviour (Mihalic & Elliott, 1997). In addition, Asian IPV victims face exacerbated risk due to various culture-specific factors. These include the following: women receiving physical/psychological abuse from their mother-in-laws (Raj, Livramento, Santana, Gupta, & Silverman, 2006); attitudes condoning IPV (for example, Chinese sayings such as “Beating is love, and scolding is intimacy” that normalise abuse [Xu, Fengchuan, O’Campo, Koenig, Mock, & Campbell, 2005]); attitudes perpetuating women’s subordination and men’s superiority (Enabling Change Rebuilding Lives [EACH], 2009; Yoshioka. et al., 2000); and value placed on self-restraint of emotional/behavioural expression that has been associated with a built-up and eventual explosion of feelings that may prove fatal (Kitano & Kikumura, 1976). Despite growing knowledge of the aforementioned range of risk factors, there is little consideration of integrating them into existing intervention models. Furthermore, with compelling evidence that women too are primary perpetrators of IPV, existing patriarchal models of IPV have little relevance for treating women. For these reasons, the second part of this paper examines the limitations of the traditionally patriarchal approach to conceptualising and treating IPV. Due to a lack of capacity rather than a lack of relevance of other factors, this paper focuses on the inadequate consideration of individual and relational factors associated with the developmental trajectory of IPV. In particular, a model of IPV derived from an attachment framework that applies across gender and culture, is explored and its implications for therapeutic interventions are discussed.

Part 1

1.3 The Gender Symmetry debate

1.3.1 The Feminist perspective

Supporters of the feminist perspective view men as the primary perpetrators of IPV. According to this theory, IPV at home is an extension of patriarchal values in society permitting men to utilise violence to control women and retain a position of power (Dobash & Dobash, 1977). This ideology was born from analogous descriptions of terror experienced by women victims presenting at refuges with horrific physical and psychological scars (Dobash & Dobash, 1979). Specifically, these women provided strikingly similar narratives of how men dominated them by controlling everything from their basic needs to enforcing ‘rules’ on how women ‘should’ live (Stark, 2007). Hence, throughout the 1970s and 1980s, the image representing ‘domestic violence’ both in society and the research field was one of a helpless woman enduring horrific, repeated assaults from a dominating man. At a time where patriarchal ideologies prevailed in Western society, focusing on men-to-women violence was necessary given that men who held onto such views tended to perpetrate more IPV (Lenton, 1995; Smith, 1987). Indeed, such focus remains priority in traditionally more patriarchal societies. Importantly, this research focus together with fervent advocacy for women’s rights in the latter half of the 1980s to mid 1990s exposed and initiated public interests in the dreadful consequences of IPV on women. As a result, services, public awareness campaigns and policies were set up to support women’s needs (Dunphy, 2001). Thus at a time where men reigned in society, feminists necessarily pushed a gendered concept of IPV that exposed the horrific consequences of combining patriarchy and violence on women.

When extreme samples are considered, the feminist portrayal of patriarchal violence comes supported and women victims are consistently overrepresented at shelters and emergency departments (Koss, Bailey, Yuan, Herrera, & Lichter, 2003; Frieze, 2005). Indeed, statistics from crime and shelter studies that assess extreme forms of IPV, have indicated that

far more women than men are victims in IPV related arrests (Melton & Belknap, 2003). For instance, the National Violence Against Women (NVAW) (Reno, Marcus, Leary, & Samuels, 2000) study surveyed men and women from 16000 households in the U.S. and concluded that women were approximately three times more likely to be physically assaulted than men were by intimates. From another national data source, the U.S Department of Justice (Feb 2003 <http://ojp.usdoj.gov/bjs>) indicated that 85% of IPV victims were women, and that 33% of women compared to only 4% of men were murdered by an intimate. While these statistics provided persuasive evidence for gender asymmetry in IPV perpetration, it should be noted that generalising data from crime surveys to the general population is problematic and systematic biases have been found in such data (Moffitt, Robins & Caspi, 2001). Even so, within crime data, it is apparent that a proportion of men, albeit substantially fewer, are subjected to women's violence and to reason that patriarchy is the one truth behind IPV is simply untrue.

The feminist movement in IPV research has benefited women victims by giving them the support needed to step out and seek help; and despite its shortfalls, likely continues to have relevance in more traditionally patriarchal societies around the world. At the same time however, feminism has created difficulties for women who do not fit into the stereotype of the passive female victim (Stark, 1995) and argues that women cannot be IPV perpetrators (Carney, Buttell & Dutton, 2007). This has resulted in an almost complete lack of services developed specifically to help female IPV perpetrators learn to reduce their violence (Dowd, 2001). Furthermore, with emerging research reporting that women not only perpetrated violence but also did so at rates comparable to men; there was a need to search for reasons for IPV beyond that of patriarchy. As a result, this led to the conglomeration of researchers who challenged the feminist view of women as passive victims and the opposing *Family violence* perspective was form.

1.3.2 The Family Violence perspective

Researchers from the family violence perspective believe that IPV is reciprocal and that both sexes share responsibility in perpetration. In fact, evidence first supporting this view surfaced in 1975 when the National Crime Victimization Survey (NCVS) (Klaus, 2004) reported that women aggressed at similar rates to men. This finding was unexpected and went against the traditional understanding of ‘domestic violence’. It sparked a chain of research to examine this ‘anomaly’ and since then, over 200 empirical studies from western nations have evidenced gender comparable rates of IPV perpetration (Fiebert, 2010). Feminist researchers were unable to explain female violence and many feared that gender equivalent results would result in years of fervent advocacy to protect women victims being lost. For these reasons, advocates of the family violence perspective (e.g., Straus, 2011) argued that feminist researchers chose to hide, reinterpret or deny such results. Even so, robust meta-analysis and reviews of the literature emerged over the last decades (e.g., Archer, 2000; Desmarais, Reeves, Nicholls, Telford & Fiebert, 2012) that provided such compelling evidence for gender equivalent IPV perpetration rates that it could no longer be dismissed.

Over the past decades, researchers from the feminist versus the family violence perspective have ardently fought over the origins of IPV. While feminist researchers believe that IPV is rooted in patriarchal values condoned by society, family violence researchers argue that IPV is not confined to gender issues but may include other gender-neutral individual and relational factors. Despite a long history of contention, with discrepant yet compelling empirical results presented by both sides, it is unlikely that either side will back down soon. This is particularly so given that serious implications for policy, victim services and funding are based on the direction in which the gender symmetry debate heads. Nonetheless in an attempt to bridge the gap between the two sides, researchers set out to explain the phenomena.

1.3.3 Reasons for discrepant results from both sides

First, researchers highlighted that almost all evidence cited by the family violence camp utilised data measured with the “Conflict Tactics Scales” developed in the 1970s by sociologist Murray Straus (Kimmel, 2002). Indeed, the CTS has been challenged on many counts and the main criticisms (drawn from DeKeseredy & Schwartz, 1998 and Kimmel, 2002) are presented. First, the CTS failed to measure a range of less severe (e.g., scratches or burns) or more importantly, more severe forms of IPV like sexual assault. Second, the CTS ranked questions on abuse behaviours from least to most severe. Critics argued that this inaccurately presumed that psychological aggression and ‘less severe’ physical assault were least harmful. Third, in its instructions to respondents, the CTS framed IPV as ‘family violence’ that escalated as a result of arguments. Thus, critics claimed that the CTS failed to encapsulate severe forms of male on female violence described by feminists. Lastly, the CTS failed to contextualise violence. That is, find out perpetrators’ motivations for abusing or the consequences of abuse. For example, if a respondent aggressed in self-defence, he/she was considered as having aggressed all the same as a respondent who aggressed to dominate. Further, if a respondent slapped a partner, he/she would have been considered as a perpetrator of violence all the same as a respondent who used a weapon. As the most widely used measure of IPV, it is prudent that the author and his collaborators took note of these drawbacks and the revisions are presented next.

In response to criticisms, Straus, Hamby, Boney-McCoy, and Sugarman (1996) revised the CTS and developed the CTS2. First, the CTS2 included a broader range of physical and psychological abuse items, and incorporated a sexual assault scale. Furthermore, the CTS2 no longer ranked items in order of severity. Next, to differentiate between abuse that caused injury from those that did not, the CTS2 added an injury scale. Thus, for more than a decade, the original criticisms of the CTS no longer applied. Nonetheless, the CTS2 continued to frame IPV in terms of escalated arguments due to disagreements, growing

annoyance, or due to a “bad mood”, feeling “tired” or other reasons. Critics argue this resulted in the exclusion of measuring control-initiated IPV (DeKeseredy & Schwartz, 1998; Kimmel, 2002). On the contrary, such ‘normalisation’ of IPV may possibly reduce respondents’ guardedness and increase their honesty. To address the lack of contextualisation of the CTS, the authors asserted that the CTS2 was to be used in conjunction with other measures. Hence, since the launch of the revised CTS2, many of the original criticisms were no longer relevant. Nevertheless, several limitations remained and of importance, was that individual researchers needed to take it upon themselves to include additional measures to contextualise IPV.

In any case, criticisms that gender symmetrical violence only emerged from studies using the CTS have been weakened by recent research. In a review by Desmarais et al., (2012) the pooled prevalence rates of IPV perpetration were reported to be higher for women (26.7%) than men (17.5%) in 30 studies that used instruments other than the CTS to measure abuse. Furthermore, another recent review by Straus (2011) that compared “clinical-level” of violence restricted to severe acts of IPV causing injury reported that amongst 21 agency sample studies, although the median prevalence reported for men’s perpetration (63%) was higher than for females (48%), results nevertheless highlighted that females too perpetrate severe IPV.

Next, feminist researchers purported that gender equivalent or higher rates of female perpetrated IPV were due to women being more honest in their reporting than men (Carney et al., 2007). This claim however was not substantiated by evidence and the International Dating Violence Study (IDVS) on 16 countries reported that women scored significant higher on social desirability than men (Straus, 2004). Hence, contrary to feminist belief, across 16 countries that included both more and less patriarchal societies, women were less likely to acknowledge their own perpetration and other reasons were needed to account for women’s violence.

When confronted with evidence of women's perpetration, feminist researchers reasoned that women necessarily aggressed in self-defence or that men's violence were far more severe. Certainly, research has evidenced that women are substantially more likely to perpetrate IPV in self-defence (e.g., Dekeseredy, Saunders, Schwartz, & Alyi, 1997; Langhinrichsen-Rohling, Neidig, & Thorn, 1995) and Langhinrichsen-Rohling and colleagues (1995) reported that although couples mandated to IPV treatment were reciprocally violent, men used more severe physical violence than women. Furthermore, in a study on more than 2,500 official cases of IPV, Melton and Belknap (2003) reported that men arrested were more likely to have multiple IPV related arrests whereas females were more likely to have been arrested together with their partner. In both Melton and Belknap's (2003) and Henning, Renauer and Holdford (2006) that studied women arrested for IPV, it was found that women were not the primary perpetrator in the incident they were charged for. As such, it is indisputable that self-defence motivates a substantial portion of female violence, and possibly more so in cases that result in arrest. However, it is still important to acknowledge that women's violence aetiology is as multilayered as men's. In Straus's (2011) review of seven studies (Carrado, George, Loxam, Jones, & Templar, 1996; Cascardi & Vivian, 1995; Felson & Messner, 1998; Follingstad, Wright, Lloyd, & Sebastian, 1991; Pearson, 1997; Sarantakos, 1998; Sommer, 1996) it was concluded that self-defence accounted for only 5-15% of women's assaults amongst a myriad of other factors. Moreover, in an earlier review of nine studies measuring defence and IPV, Straus (2008) reported that none found women to primarily aggress in self-defence. In fact, half reported more men than women acted out of defence. Whilst Straus' reputation as a key family violence researcher may lead to questions regarding biasness of his chosen studies, further disputing the self-defence claim, a review of longitudinal data by Carney, Buttel and Dutton (2007) concluded that violence had a long history of development preceding the existing intimate relationship. Hence, the argument that

women assault solely in self-defence does not hold, especially given evidence of women perpetrating violence at levels of brutality comparable to men.

Research demonstrating that women perpetrated severe IPV had the most potential to undo legislations put in place to protect women. Hence these results were strongly contended by feminist researchers. In an attempt to close the gap between two opposing sides, careful analyses of methodologies led researchers to conclude that feminist and family violence researchers were measuring two mutually exclusive samples (Kimmel, 2002). Specifically, it was argued that the feminist theory found supporting evidence for significantly higher male perpetration because they extracted data from extreme samples such as courts, refuges or hospitals. Hence, only cases severe enough to require professional intervention were included (Kimmel, 2002). This suggested that severe, one-sided IPV was heavily skewed towards male perpetration. On the other hand, it was argued that family violence researchers drew evidence from general population studies that included undergraduates or community samples. Hence, suggesting that only less severe, more 'common place' IPV was measured which accounted for gender equivalent or higher levels of female IPV perpetration (Kimmel, 2002). Discounting this argument however, a review of 91 studies by Straus (2011) evidenced gender equivalent perpetration rates in clinical and agency samples. Furthermore, the NISVS reported that lifetime estimates for experiencing rape, physical violence, and/or stalking by an intimate partner were 25.3% to 49.1% for women and a slightly lower but still comparable 17.4% to 41.2% for men (Black et al., 2011). In the most recent review by Langhinrichsen-Rohling, Selwyn, and Rohling (2012) on 48 studies published after 1990, bi-directional violence was also reported to occur across different samples (large population, smaller community, school, female-oriented treatment seeking, male-oriented military based and legal/justice samples). Taken together, it can no longer be denied that women too perpetrate severe IPV, whether or not it is at the same frequency and prevalence as men. Nevertheless, the frightening reality that confronted feminists was that women seeking protection remained

drastically overrepresented (Koss et al., 2003; Frieze, 2005) and the mismatch between reality and research called for further investigation.

To explain this discrepancy, researchers highlighted the unequal consequences of IPV on men and women. Notably, it was consistently reported that compared to females, male perpetrators caused more severe injuries (Archer, 2000; National Crime Prevention, 2001; Warner, 2010), fatalities (statistics from the U.S. Department of Justice report that in 2000, 1,247 women and 440 men were killed by an intimate partner; statistics from Australia (Chan & Payne, 2013) reported that from the period between July 2008 to June 2010 73% of victims killed by an intimate partner were women), and evoked greater fear (Pence & Paymar, 1993; National Crime Prevention, 2001). The NISVS also reported that approximately 30% of women victims compared to 10% of men victims experienced mental distress, injury, missing work, or required professional services (Black et al., 2011). Consistent with the more dire outcomes of men's violence highlighted, the Australian Bureau of Statistics (2006) reported that women were more likely than men to experience repeated violence, particularly when violence was perpetrated by an existing partner. Furthermore, the Australian Institute of Health and Welfare (2011) reported that in 2009-2010, women made up 96% (n=31,800) of clients seeking homelessness services of whom IPV was the main reason that led to their homelessness. Hence, based on level of harm, feminist are right to argue that women are disproportionately at risk. This is not to say however that male victims do not suffer dire consequences or fatalities. They just do so at a lower rate but still deserve acknowledgement.

On a whole, it is clear that both men and women perpetrate severe forms of IPV and experience devastating impacts from IPV; although men generally, possibly due to their biologically stronger physique, have the capacity to cause more harm than women. It is therefore understandable that feminists experience great angst, particularly in male-dominant societies where women's reduced status can practically (e.g., financial independence) as well as psychologically (e.g., limited empowerment or support from the community) impede their

ability to leave abusive relationships. Indeed, Singapore is one such country where patriarchal values continue to stream through social and political systems and the discussion now turns to a consideration of gendered IPV issues there.

1.4 Gendered issues in a Singapore context

To the untrained eye, the idea of Singapore as a patriarchal society may be surprising because in many respects, particularly in the workforce and educational spheres, Singapore generally affords gender equality (Tan, 2001; Jongwilaiwan & Thompson, 2011). However, in the family domain, much of Singapore's society retains a patriarchal mindset with men as 'head' of the household (Tan, 2001; Jongwilaiwan & Thompson, 2011). Singapore is diverse in her ethic as well as religious make-up. At the time of writing, there was no research found comparing cultural differences and the levels of patriarchal beliefs within each culture let alone relating these to IPV in Singapore. In a study by Ganapathy (2006) on policing culture and IPV in Singapore, cultural stereotypes were reflected. For instance one officer stated "If Chinese is involved, it must be gambling problems or money problems, for Indians it must be drinking. . . . for Malays, it must be drugs. . . .". Although this stereotype can by no means be generalized or be said to accurately reflect what is indeed occurring between cultures, it does however highlight the possibility that different attitudes and/or risk factors relate to different ethnic groups that should be examined. Due to a lack of scope and not a lack of importance, this area is not explored in the current paper but is highlighted as a potential area for future research to pursue. Nevertheless, given that patriarchy is widely underscored as a key reason for IPV, this next section explores how Singapore's unapparent patriarchy in the family sphere adds complexity to researching IPV in Singapore. At this point in research, due to a lack of knowledge, this subsequent discussion is unable to accurately separate patriarchal beliefs according to ethic and religious groups in Singapore. Thus, the discussion draws upon Singapore's legislation, which sweeps across Singaporeans regardless of ethic or religious

make-up.

In Singapore, women have only relatively recently been afforded legal protection against *family violence* (Singapore legislation's term for IPV). Amendments to the *Women's Charter* in Singapore only came into effect in 1997 to provide broader legal protection to victims of IPV. It is beyond the scope of this paper to discuss Singapore's legislation changes however readers are referred to the Women's Charter available from Chapter 35 of the Singapore Statutes Online (www.statutes.agc.gov.sg) or an overview of the Women's Charter and related changes found on the Singapore Council of Women's Organisation's website (www.scwo.org.sg). Amidst these positive changes however it is alarming that Singapore has yet to criminalise marital rape, an extremely form of IPV. Up until 4 years ago, it was not an offense for a spouse to engage in non-consensual sexual intercourse (MCYS, 2008). In 2008, following pressure from feminist advocates such as the Association of Women for Action and Research (AWARE), Singapore's legislation recognised that rape could occur between spouses. However this was restricted to circumstances in which 1) spouses lived apart or 2) if a wife had an existing Personal Protection Order (PPO) against her husband. For this reason, although Singapore is progressing, Singapore's legislation still needs to expedite the progression of its laws to accord IPV victims full protection. Only then, can victims have confidence that their rights to safety are fully supported.

This struggle to get women's needs recognised may render researchers apprehensive about tackling female perpetration out of fear that women may be wrongly blamed for IPV or that results would be misused and/or misinterpreted. Indeed, a recent review by Straus (2012a) on 14 patriarchal nations concluded that approximately the same or more women than men physically assaulted their partners. Thus, the likelihood that research in Singapore would generate similar results is high. Regardless of the results however, what remains important is that services set up to protect victims stay, and that legislators understand that reciprocal or one-sided women perpetrated IPV does not indicate that women need less protection (that is,

less funding and attention to women's safety) (Langhinrichsen-Rohling et al., 2012). In fact, research has reported that the propensity for injury increases when IPV is reciprocal as compared to one-sided (Gray & Foshee, 1997; Whitaker, Haileyesus, Swahn, & Saltzman, 2007). Moreover, it is known that women's violence increases her risk of victimisation (Ross & Babcock, 2007). This point is especially highlighted because in Singapore, the government is reputed to take punitive action against 'offenders'. However, amidst the complexities of IPV, the offender in this situation may well be the same person in need of shelter and protection; and such one-dimensional responding needs rethinking. Studying women's violence inadvertently serves to improve women's safety and is necessary to understand IPV. While fears may be warranted, the solution is not to avoid studying women's violence but to ensure that proper and reasonable solutions are sought to manage IPV; and not merely enforcing reactionary measures.

Ultimately, if fear of repercussions leads to avoidance as it has for a while, there is danger in overlooking the much-forgotten male victim. In Singapore, one study was found to explore male victimisation. Foo and Seow (2005b) sampled 14 male victims presenting to an emergency department and reported that the men often presented for repeated physical assault although injuries were generally superficial. In a larger study on 279 Singapore undergraduates, the International Dating Violence Survey (IDVS) (Straus, 2004) concluded that females reported IPV perpetration rates more than twice that of males. Furthermore females reported perpetrating severe violence more than four times that of males and males sustained a higher rate of overall injury. However, consistent with international patterns, only females (but no males) reported sustaining severe injuries. Notably, in a local newspaper article (The Straits Times, 4 Mar 2004, p.H1), it was reported that men in 2004, were two to three times more likely to file for a PPO against women than seven years prior. In the same article, reflecting the view of Singapore's wider society, counsellors interviewed suggested that men sought PPOs in retaliation to their partners taking out PPOs on them first. Certainly,

this holds true in various cases. However, this argument is weakened by results from aforementioned studies that showcased women engaging in severe and repeated forms of IPV. Recognising that men cause more harm, in no way suggests that women's perpetration should be dismissed as an unimportant issue (Saunders, 2002). Neither is it fair to assume that whenever women aggress, their motivations are justified. In fact, in a patriarchal society as Singapore, male victims likely face steeper challenges seeking help. Not only would men experience the same unwillingness found in female victims to report IPV but their level of shame may be exaggerated because the idea of a man being abused by a woman is stigmatised in an Asian society where "face" is a treasured value (Seow & Foo, 2006). No doubt preliminary, research in Singapore evidences male victimisation. Even though men's injuries remain less severe than females, it is only right that research include female perpetration to address victimisation, regardless of gender.

Integrating local and international research, Singaporean women like women around the world remain disproportionately disadvantaged and more seriously hurt than men. However it cannot be denied that women engage in violence as severe and multifaceted as men. In fact, men are disproportionately disadvantage when it comes to receiving help. For these reasons, is it important that the same level of attention be afforded to studying women's IPV perpetration as men's. It is imperative to understand women's dual roles as perpetrators and victims in order have an accurate formulation of IPV and its corresponding therapeutic interventions.

Part 2

2.1 Limitations to current patriarchal based conceptualisations of IPV: Exploring an alternative approach

In the U.S, the historical denial of female perpetration has resulted in policies being framed around the premise of patriarchy (Corvo & Johnson, 2012). As such, the leading

batterer intervention program (BIP) in the U.S is the patriarchal based *Duluth model* (Babcock et al., 2004). The Duluth model was originally formulated and has been helpful in coordinating an interagency response to IPV with a paramount goal of keeping victims safe (Domestic Abuse Intervention Programs: DAIP, 2009). Beyond systematizing a joint response to IPV, the Duluth model's framework has been adapted by perpetrator programs. Such programs are based upon the belief that psychological change occurs when men examine their beliefs (within a cultural context of patriarchy) that lead them to exert domination over a partner (DAIP, 2009). Incidentally, with the U.S. leading the way, Europe, Australia (Rodwell & Smith, 2008), as well as Singapore have adapted this model. This is not ideal because not only is Singapore's society and culture vastly different to the U.S but there is limited evidence to date (Babcock et al., 2004) to support the efficacy of adopting the Duluth model as a treatment framework. With the lack of local research and/or alternatives however, this may seem like the best or only current option. Treatment programs that adopt a Duluth framework are typically delivered via psycho-education and focus on how men's patriarchal attitudes lead them to using power to control women (Pence & Paymar, 1993). It was developed based on the narratives of female victims and the tactics reportedly used against them by men. Ensuing from this, the Power and Control Wheel (Pence & Paymar, 1986) was formed that classifies eight domains of power and control that men engage in within intimate relationships. In the program, men are encouraged to be accountable for their actions on each domain which include: intimidation, emotional abuse, isolation, minimising, denying and blaming, using children, using male privilege, economic abuse, and coercion and threats. Broadly, the Duluth program aims to rehabilitate men by challenging and modifying their use of control tactics within areas of their relationship identified to be most problematic.

The widespread implementation of Duluth-type programs has been a noble attempt to address the therapeutic needs of perpetrators. However, Duluth programs are limited by their underlying discourse that patriarchy is the main cause of violence against women. There is no

contesting that an extreme subset of IPV involves heinous one-sided male violence and that some women retaliate in defence. However, such violence has been argued to be comparatively rare (Straus, 2011). On the contrary, reciprocal IPV has been established to be more widespread (Archer, 2000; Caetano Vaeth, & Ramisetty-Mikler, 2005; Straus & Gozjolko, in press; Whitaker et al., 2007). Further, in a study by Charles, Whitaker, Le, Swahn and DiClemente (2011) on a nationally representative sample of young adults in the U.S., minimal sex differences were found in the processes underlying IPV perpetration. These studies highlight that IPV is not confined to male-only perpetration and often is reciprocal. Thus, it is unrealistic that the treatment of choice tackles IPV perpetration in isolation from relational and individual factors applicable across sexes.

The Duluth program is nested within a strong body of research evidencing the link between control and IPV (e.g., Hamberger & Guse, 2002; Laroche, 2005). However, when patriarchy was analysed at an individual level, a meta-analysis of patriarchal ideology and assaults on wives found that only men's attitude towards violence predicted wife assault (Sugarman & Frankel, 1996). In fact, Felson (2002) reported that patriarchal societies may instead adopt protective attitudes towards women that commend chivalry and protect women from men's violence. Supporting this view, research by Sorenson and Telles (1991) found that Hispanic men (known to hold on to more traditionally patriarchal views than their non-Hispanic Americans counterparts) had half the rates of wife assault compared to non-Hispanic Americans; and Kantor et al. (1994) found that Anglo Americans or less traditional Hispanic men were more likely to use physical aggression against a partner than more traditional Hispanic men who supported 'machismo' values of male dominance and independence, and women and children's obedience.

Moreover, it is ironic that for an intervention targeted at men, developers made no attempt to incorporate men's individual experiences of IPV. Perhaps, this resistance emanates from fear that searching for reasons equates to finding 'excuses' for violent behaviour. Indeed

the Duluth manual states, *“To attach a clinical diagnosis to the batterers’ use of violence provides a rationalization for behaviour that may not be accurate”* (Pence & Paymar, 1993, p.23). Contrary to their assertion, this paper argues that explorations of developmental factors leading up to IPV (i.e., the ‘rationale’) both in research and within therapy is necessary to fully comprehending the reality of IPV. Ignoring men’s take on violence only serves to impede the universal goal of improving prevention and interventions.

In fact, the Duluth model’s core focus on patriarchal issues may inadvertently be harmful because victims’ have been reported to anticipate effective transformation in partners following program completion (Gregory & Erez, 2002). However men who have completed these programs may not be any more equipped to handle relational dysfunctions as they were when they started. This is a valid concern as researchers reported that 50-70% of women remain in relationships with IPV (Feazelle, Mayers, & Deschner, 1984; McCollum & Stith, 2008).

Perhaps it could be posited that within the program, experienced facilitators take it upon themselves to address psychological and relational issues of participants in addition to administering Duluth components. However, various certifying agencies of Duluth programs have prohibited facilitators from deviating from these components (Corvo, Dutton, Chen, 2009). According to the Duluth manual, *“Most group members are participating not because of a personal or family dysfunction but rather because violence is a socialized option for men.”* (Pence & Paymar, 1993, p.23). Such a narrow approach to an immensely dynamic issue possibly explains the results of a meta-analytic review of male BIPs that found that the Duluth program yielded a small effect size (Babcock et al., 2004). Depending on the experimental design, Babcock and colleagues found the effect size to range from $d=0.12$ to $d=0.35$. In the same meta-analyses, cognitive-behavioural therapy (CBT) groups were also examined and there was no significant difference between the effect sizes between CBT vs. Duluth-type programs. Indeed, akin to Duluth-type programs, many CBT programs address perpetrator

attitudes towards women (including that of patriarchy). Thus, it is possible that because many CBT groups address perpetrator attitudes towards women (that is, patriarchal attitudes) (Babcock et al., 2004); that this may have influenced the effectiveness of CBT programs. However, because the distinctions between CBT and Duluth-type programs were unclear in Babcock et al.'s (2004) study, this remains nothing beyond speculation. Regardless, compared to psychotherapy treating general aggression in an inmate population, BIPs overall yielded an almost 60% lower success rate (Feder & Forde, 2000). A closer analyses of the Duluth program reveals that a major portion is getting perpetrators' to recognise their wrongdoings and abuse tactics. Although recognition is essential for change, at the same time, Stern (1998) argued that the 'search' with a client is an integral part of treatment and building a therapeutic relationship. If treatment leaves little room for exploring other causes of abuse other than challenging a predetermined reason for perpetration, this may restrict development of the therapeutic relationship. Given research reported that the therapeutic relationship accounts for 30% of therapy outcomes (Lambert, 1992), this restriction is possibly one reason for the 40-60% (Davis, Taylor, & Maxwell, 2000) dropout rate. Overall, the strict guidelines for disseminating the Duluth program (no doubt an understandable regulation to maintain the integrity of a program) have limited opportunities for facilitators to address relational issues or to explore the inner experiences of participants. Further, the primary focus of patriarchy being key to IPV development impedes a fundamental part of therapy – the need to be open and collaboratively explore.

To complicate matters further, due to the unexpected influx of female perpetrator arrests following the introduction of the 1980s "warrantless arrests" legislation in the U.S. (where police had the authority to arrest perpetrators without the victim pressing charges), the urgent need for BIPs for women perpetrators led to programs being hastily adapted from male BIPs (Martin, 1997; Dowd, 2001). Presently too few evaluations have been conducted on female BIPs for firm conclusions to be made on their success rate. However, given that BIPs

were originally designed for men and focused on patriarchal issues, it is expected that the success rates for women would be equally poor or worse as compared to men.

Adherence to patriarchal ideology and denying female perpetration has resulted in the Duluth model dominating the U.S. and its patron countries, despite its lack of empirical support. Indeed, widespread research has evidenced reciprocal and one-sided female perpetrated IPV and reported similar processes to underlie both male and female perpetration. Essentially, results underscore the need to broaden this narrow conceptualisation of IPV that is inadequate.

2.2 Alternate conceptualisation: Johnson's typologies

In an attempt to refine this singular conceptualisation of IPV, yet heavily drawing upon the eight domains of coercive control identified by the Duluth model, Johnson (1995, 2006) developed a method of differentiating IPV. Specifically, Johnson (2006) conducted post-hoc analyses on existing interview data from 274 married and formerly married women from agency and community samples in southwestern Pennsylvania in the late 1970s. From his analyses, Johnson (2006) proposed four IPV typologies according to control motives behind perpetration: *Intimate Terrorism* – violence perpetrated to control a partner who is either non-violent or who uses non-controlling violence; *Violent Resistance* – violence perpetrated in retaliation/defence to Intimate Terrorism; *Mutual Violent Control* – violence perpetrated by both partners to control each other; and *Situational Couple Violence* – non-controlling violence that could be one-sided or reciprocal, and likely results from an escalation of situational conflict. In addition, Johnson (2006) highlighted that each IPV typology had different underlying motives and he made some attempt at putting each type of IPV into context. Ensuing from his analyses, Johnson (1995, 2006) exerted that in heterosexual relationships: *Intimate Terrorism* is almost exclusively male perpetrated and parallels the severe, one-sided, patriarchal violence described by feminists; *Violent Resistance*

is almost exclusively female-perpetrated and supported the feminist theory of women's violence being primarily motivated by self-defence; *Situational Couple Violence* is equally perpetrated across sexes and primarily stems from situational conflicts over more common (e.g., finances, parenting or chores) as well as less common (e.g., substance use) issues (Johnson, 1995). SCV is thought to occur less frequently and is less likely to escalate over time (Johnson, 2006). This supported arguments that gender equivalent perpetration was found when less violent, more 'common' IPV were measured; and *Mutual Violent Control*, although reported to be perpetrated equally across sexes, was noted to be only perpetrated by five couples in the sample and firm conclusions are yet to be drawn on this particular typology (Kelly & Johnson, 2008). From his research, Johnson (2006) asserted that different types of IPV had different underlying risk factors, and that conclusions cannot be drawn from research that failed to make such distinctions.

It is important to note however that Johnson's (2006) conclusions may have been premature. His sample was not only limited because of its specificity and small sample size, but also that only women's response were measured. For these reasons, his conclusions at the time may not be generalized beyond that sample of women. Despite its limitations, Johnson's research and proposing theories have revolutionised how researchers think about and measure IPV. IPV is no longer considered a uniform phenomenon. Instead researchers have begun to recognise that different types of IPV emerge from different developmental trajectories and their outcomes vary in gravity. Furthermore, Johnson's acknowledgment of the dyadic nature of IPV has prompted researchers to think about IPV as a relational issue. Possibly the most influential conceptualisation of IPV to date, a general journal search revealed that over 2000 studies have cited Johnson's articles since his original 1995 study.

Akin to the Duluth model's conceptualisation of IPV nevertheless, Johnson's explanation for the causes of IPV remain focus on issues of power and control. Testament to the limitations of Johnson's theoretical conclusions, results from other researchers who have

replicated Johnson's methods of identifying IPV typologies on agency (e.g., Graham-kevan and Archer's 2003 study on a North England prison sample) as well as general population samples (e.g., Straus and Gozjolko's on a large university sample) found that the proportion of men and women that fit into each typology were contrary to the theories that Johnson (2006) proposed. For example, both Straus and Gozjolko (in press) and Grahman-Kevan and Archer (2003) found that in their general population and prison sample respectively, men and women perpetrated IT at comparable rates. Furthermore, although limited by a small sample, Grahman-Kevan and Archer (2003) found that both men and women perpetrated VR. These findings, regardless of their limitations highlight the complex nature of IPV that cannot merely be explained by power and control. Thus, looking to integrate other theories to explain the multifaceted nature of IPV an alternative conceptualisation is explored in the following section.

2.3 An alternative conceptualisation of IPV: An Attachment perspective

For years, researchers (e.g., Babcock et al., 2004; Dutton & Corvo, 2007; Labriola, Rempel & Davis, 2005; Lawson, 2003; Rosenbaum & Leisring, 2003) have lobbied for the expansion of existing patriarchal conceptualisations to include other theories. Amongst existing theories, attachment theory has been purported to have the most promise (Sonkin & Dutton, 2003; Fonagy, 1999). Attachment theory not only provides a framework of understanding the development of IPV and its associated risk factors in the context of a relationship but also sheds light on the subjective experiences of the individual (Bowlby, 1969, 1980; Fonagy, 2004). To date, because IPV treatment has focused so much on patriarchy, there is an overall lack of research on attachment-based models of treatment. Nevertheless, preliminary findings from Stosny's (1995) "The Compassion Program" - a CBT program based on attachment theory - have been promising; where perpetrators are 87% free from violence, 71% free from verbal aggression and reports a 74% completion rate of those

mandated into attending (CompassionPower, 2013). Furthermore, responding to the lack of models including female IPV perpetration, attachment theory can be applied across sexes. Supporting this claim, research has consistently evidenced a link between adult attachment anxiety to IPV perpetration by men (e.g., Babcock, Jacobson, Gottman, & Yerington, 2000; Henderson, Bartholomew, Trinke, & Kwong, 2005; Dutton, Saunders, Starzomski, & Bartholomew, 1994; Holtzworth-Munroe, Stuart & Hutchinson, 1997; Sonkin & Dutton 2003) and women (Carney & Buttell 2005; Henderson et al., 2005; Orcutt, Garcia & Pickett, 2005; Roberts & Noller, 1998). With regard to culture, some cross-cultural studies concluded that the spread of infants that experience secure versus insecure types of attachment differ across culture (Grossman, Grossman, Spangler, Suess, & Unzner, 1985; Miyake, Chen & Campos, 1985); and these differences were attributed to varying cultural norms regarding proper parenting (Miyake et al., 1985). To date, attachment research has primarily been concentrated in the West (Rothbaum, Weisz, Pott, Miyake, & Morelli, 2001). Thus, further research is needed to ascertain attachment norms across cultures. At the same time nonetheless, attachment theorists such as Cassidy and Shaver, (1999) and van Ijzendoorn and Sagi, (1999) have asserted that regardless of culture, the fundamental processes underlying attachment are unanimous; even though overtly, attachment possibly presented differently via culturally different behaviour. As such, compared to any other theory, an attachment framework is likely one of the most cross-culturally applicable models available. Taken together, it appears that in addition to offering an alternate conceptualisation to existing patriarchal ideas of IPV, attachment theory benefits by cutting across both gender and cultural boundaries. For these reasons, this paper attempts to expand existing conceptualisations of IPV beyond patriarchal explanations by exploring the theory behind an attachment-based *rejection-abuse cycle (RAC)* model of IPV originally purported by Brown, James and Taylor (2010).

To date, many studies on attachment have been restricted to exploring direct linkages between attachment and IPV (e.g., Ross & Pfäfflin, 2007; Carney & Buttel, 2005; Henderson et al., 2005; Holtzworth-Munroe et al., 1997). In order to understand the inner processes that lead to perpetration nonetheless, Brown and colleagues (2010) set out to investigate if there were intervening steps between attachment and abuse. Specifically, connecting existing research on emotional risk factors for IPV, they proposed a cycle of IPV where a vulnerable individual's sensitivity to rejection follows a pathway of overwhelming emotions and ineffective coping strategies that end in abuse perpetration. Abuse then elicits further rejection and ultimately a cycle of IPV is maintained.

This section expands upon the theory behind the RAC model than that which was abbreviated in Brown and colleagues (2010) paper. First, it provides a condensed overview of how different attachment styles are formed and maintained till adulthood. Next, it addresses the developmental trajectory of abusive behaviours in the context of impaired attachment and then illustrates the components of the RAC model before discussing the model in its entirety.

2.3.1 Overview of attachment styles

Attachment is a lasting emotional bond characterised by an inclination to seek proximity to one's primary attachment figure especially during times of fear (Bowlby, 1973). Infants are completely dependent on caregivers and their ability to attach ensures survival (Bowlby, 1973). Therefore, when separated from caregivers, infants instinctively display distress and seek reconnection. Ideally, caregivers respond lovingly, which encourages *secure* infant-carer attachments to develop (Ainsworth, Blehar, Waters, & Hall, 1978; Bowlby, 1973). Through experimental observations of children's reactions to separations and unions to their mothers, Ainsworth and colleagues (1978) concluded that secure children may or may not have been distressed during separation but were easily soothed by their mothers upon reunion. To sooth a child's distress, caregivers mirror children's affect and adjust their own

affect accordingly. Through repeated experiences of having their distressed soothed, children learn that painful emotions can be regulated (Fonagy, 1999). They develop a strong sense of self (Dutton et al., 1994; Fonagy, 1999) and experience the least distress to rejection (Mikulincer & Nachshon, 1991). On the other hand, a literature review by Morton & Browne, (1998) reported that if caregivers ill-treated or neglected children, children tended to develop insecure attachments. Specifically, when children are not pacified, normal distress cries may escalate to protest rage to communicate that separation is intolerable (Bowlby, 1973). If soothing is further withheld, children learn their needs are unimportant and they are unworthy of love (Stosny, 1995). They become sensitive to rejection and are quickly overwhelmed by attachment anxiety (Henderson et al., 2005). Ainsworth and colleagues (1978) observed that some of these children developed *anxious-preoccupied* attachments. They experienced distress during separation and continually sought reattachment. Yet, they were difficult to soothe upon reunion. In others, hopelessness develops and they cope via emotional detachment. Ainsworth and colleagues (1978) categorised these children as having *anxious-avoidant* attachments. They experienced little distress at separation and remained cut-off at reunion. Notably, physiological measures revealed that *anxious-avoidant* children experienced attachment anxiety, however behaved unaffected (Karen, 1977). Even more destructive, when children experience inconsistent and abusive parenting, they were reported to develop *disorganised/fearful* attachments (Hesse, Main, Yost-Abrams, & Rifkin, 2003). They experienced distress at separation but at reunion, were difficult to soothe and sought closeness to their caregivers through a confusing mix of anxious approach and avoidance (Ainsworth et al., 1978). Reflecting the disturbances in attachment when a child has to yearn for safety from the very person who is the source of danger, *disorganised/fearful* children were observed to freeze, collapse, hit their heads, hide, try to hurt their caregivers or attempt to get away (Rajackia, Lamb & Obmascher, 1978). Evidently, loving and nurturing early relationships are paramount for the development of a secure attachment and healthy sense of

self. Without a loving and emotionally attuned caregiver, children develop insecure attachments. They learn that emotions are intolerable and develop strategies such as cutting-off emotionally or protesting in rage to survive the unbearable anxieties their caregivers leave them with.

Although attachment is not entirely stable throughout life (Hazen & Shaver, 1994), Hazan and Shaver (1987) demonstrated that adult attachments were continuous of infant attachment styles, only that as adults, romantic partners replaced caregivers as attachment figures. As such, protest rage, once directed at mothers to communicate intolerance towards separation, now manifested in a subset of adults as IPV to communicate the same message (Bartholomew, Henderson, & Dutton, 2001). To conceptualise adult attachment, using data from over 1,000 university students, Brennan, Clark and Shaver (1998) conducted a factor analysis on all known self-report adult attachment measures at the time. From their research, two dimensions of adult attachment emerged –*Anxiety* and *Avoidance* that occurred on a continuum and enveloped the characteristics of the childhood attachment styles described earlier.

Adults high on attachment anxiety deeply fear and are sensitive to real or perceived threats of rejection and/or abandonment. When feeling threatened, anxious adults tend to regulate anxiety by demanding closeness or resorting to aggression to achieve proximity (Babcock et al., 2000; Dutton et al., 1994; Holtzworth-Monroe et al., 2000; Bartholomew & Allison, 2012). Indeed, research has consistently reported links between adult attachment anxiety to IPV perpetration by men (e.g., Babcock et al., 2000; Henderson et al., 2005; Dutton et al., 1994; Holtzworth-Munroe et al., 1997) and women (Carney & Buttell, 2005; Henderson et al., 2005; Orcutt et al., 2005; Roberts and Noller, 1998). On the other hand, adults high on attachment avoidance tend to retreat when feeling vulnerable in order to cut-off attachment anxiety and regain control (Mikulincer, Florian, Cowen & Cowen, 2002). To protect against feeling vulnerable, they avoid intimacy, prefer self-reliance, and are thought to remove

themselves from dysfunctional relationships before they escalate to IPV (Henderson et al., 2005). Yet, avoidant adults have also been reported to behave hostile and unforgiving towards intimates (Kobak & Sceery, 1988, Mikulincer, 1998; Shaver & Mikulincer, 2003) and may aggress in order to control or threaten their partner when feeling coddled (Mayseless, 1991). Consistent with its two-pronged conceptualisation, research linking attachment avoidance to IPV perpetration has not been consistent. Some studies evidenced links between avoidance and IPV (Babcock et al., 2000; Holtzworth-Monroe, Meehan, Herron, Rehman, & Stuart, 2000) whilst others did not (Dutton et al., 1994; Holtzworth-Munroe et al., 1997; Orcutt et al., 2005). Nevertheless, when attachment avoidance is experienced together with anxiety resulting in adults who cope via a confusing mix of avoiding and demanding intimacy, research has reported links between such disorganised attachment and IPV perpetration (Dutton et al., 1994; Holtzworth-Munroe et al., 1997). In sum, although research has shown a clear link between anxious types of attachments and IPV perpetration by men and women, the link between avoidant attachments and IPV perpetration is less clear and still developing. Thus, building upon the more stable knowledge of attachment anxiety and IPV, the RAC model focused on exploring a pathway of IPV perpetration stemming from attachment anxiety.

Within society, adults with anxious attachments are common (Broussard, 1995). Yet, only a small proportion of these individuals go on to perpetrate IPV. Fonagy (1999), a key attachment researcher purports that it is particularly the inability to think about and understand another's perspective or mental state (e.g., motivation, desires, feelings, beliefs) in a subset of anxiously attached individuals that predisposes them to aggress. This ability termed "mentalization" by Fonagy (1999) is thought to be deficient in people suffering from attachment impairments because it only develops after experiencing their own mental state and feelings being understood and reflected within a loving child-caregiver relationship. Fonagy (1999) proposes that vulnerable children protect themselves by refusing to envision

their caregivers' thoughts because doing so may result in acknowledging an unbearable truth – that their caregiver hates and/or desires to hurt them. To survive, these children distance themselves from their own as well as others' mental states in the context of attachments. Supporting this theory, a study on violent prisoners (Levinson & Fonagy, 2004) reported that almost all men refrained from speaking about their caregivers' or their own mental states in a relational context. Instead, these men functioned on the one reality they knew, that intimate partners, like their caregivers, would hurt and abandon them (Fonagy, 1999). Hence, when real or perceived rejection is experienced, this triggers vivid past rejection trauma followed by shameful feelings of being unworthy of love (Stosny, 1995).

Summarising the above discussion, individuals with anxious attachments, especially those who lack the capacity to think about their own or their partner's mental state in a context of an attachment relationship, are at the greatest risk of mistaking their own perceptions and feelings of rejection to be true. Their inability to mentalise impedes their ability to explore or rationalise any alternative meaning to real or perceived rejection from a partner. The next section deconstructs the patterned experience of these individuals from the time rejection is experienced to when IPV is perpetrated. Hereafter, when referring to individuals with anxious attachment styles, they are particularly spoken of in context of their difficulties mentalising.

2.3.2 The rejection-abuse cycle of IPV

When rejection, either real or perceived is experienced, it is thought that this triggers past rejection trauma followed closely by feelings of being unworthy of love. As Freud (1914) stated, the self is supported by love from others. Hence, when an individual experiences deprivation of love, the self is left with feelings of shame (Gilligan, 1997; Stosny, 1995). For the individual with impaired attachments, the subjective experience of shame is synonymous to a physical attack and depletion of one's sense of self (Fonagy, 1999). Thus, they clutch on

to anything within their limited resources for survival. Brown et al. (2010) theorised that one way vulnerable individuals survive is by emotionally cutting-off.

The ability to emotionally regulate is strongly associated with the quality of one's early attachments. Within the attachment field, it is widely accepted that an infant and mother engage in affective communication from birth (Bowlby, 1969; Hobson, 1993; Stern, 1977, 1985; Trevarthen, 1979; Tronick, 1989, as cited in Fonagy, 2004). Securely attached individuals experienced mothers who likely attuned to their emotions as infants and responded lovingly. Such a response involves the mother mirroring the infant's affect or otherwise adjusting her own affect in order to soothe any distress experienced by the infant (Fonagy, 2004). Through repeated experiences of affect mirroring and/or adjustment by the mother, infants learn to associate the control they have over their caregiver's emotional displays with the resulting positive change to their own affect. The infant thus experiences the self as capable of self-regulating (Gergely & Watson, 1996) and develops a strong sense of self. Individuals with impaired attachments however suffer a fragile sense of self. This is often the result of having a mother who was not attuned to their affective needs, and either neglected or responded overwhelmingly to their affect. Infants learn that their emotions are confusing, unidentifiable, and either do not initiate any response or initiate a frightening one (Fonagy, 2004). As a result these infants learn that emotions are intolerable and fail to mean anything to anyone (Dutton et al., 1994; Fonagy, 2004). The ability to emotionally regulate, especially when experiencing painful emotions, thus is highly contingent upon early attachments, where the more secure the attachment, the better the ability to manage emotions later in life.

Deconstructing the experience of anxiously attached individuals; when shame strikes, this immensely painful experience destroys the sense of self and individuals have described it as a "*feeling of numbness or deadness*" (Fonagy, 2004, p.41). This experience parallels alexithymia, defined by Sifneos (1973) as the inability to find words to express emotions.

When alexithymia is experienced, individuals may feel emotional pain, however are unable to identify, differentiate or describe the emotions (Nemiah, Freyberger & Sifeneos, 1976).

Alexithymia has been linked to dissociation (Evren, Sar, Evren, Semiz, Dalbudak, & Cakmak, 2008), a strategy associated with managing insufferable trauma-related memories and painful emotions (Tutkun, Savas, Zoroglu, Esgi, Herken, & Tiryaki, 2004; Grabe, Rainermann, Spitzer, Gansicke, & Freyberger, 2000). Both dissociation and alexithymia involve difficulties integrating painful emotions into one's consciousness (Grabe, et. al, 2000). Hence, via denial of the subjective experience of painful emotions, alexithymia theoretically helps soothe negative reactions to real or perceived rejection from a partner (Brown et al., 2010). In this way, when the experience of shame is blocked out via alexithymia, this is not only necessary for the survival of the individual's fragile sense of self, but it also arguably reduces any impulses one may have towards perpetrating abuse.

Akin to dissociation, alexithymia may effectively serve to block feelings of shame in the short-run, especially in regard to less affective conflicts. However, researchers have suggested that alexithymic individuals suffer an inability to regulate distressing emotions that result in intensified physiological reactions during highly stressful situations (Nemiah, 1978). In fact, the numbing of painful feelings may instead exacerbate aggressive responding because the perpetrator does not experience any physiological or psychological warning signals of emotional built up prior to what seems like a sudden emotional explosion (Brown, 2012). Furthermore, because alexithymia minimizes feelings, it desensitizes an individual from their feelings and arguably increases the likelihood of abuse. Hence, in the long run, when highly arousing inter-partner conflicts are encountered, the release of pent up feelings of shame is so overwhelming that all attempts to self-soothe and defend against the threat to self via alexithymic responding fail; and the need to attack the source of shame with hostility becomes essential for the individual's psychological survival (Brown et al., 2010). Through attacking the source of shame, the individual gains a temporary feeling of adequacy and sense

of control which helps heal his/her impaired sense of self (Nathanson, 1992; Brown et al., 2010). This is especially effective if the source of shame is made weaker in the process (Brown et al., 2010). Aggression therefore serves to “control” one’s own distress by “controlling” the source of shame and protects the aggressor from further condemnation (Tangney, Wagner, Fletcher & Gramzow, 1992). Essentially, the effectiveness of alexithymia as a coping mechanism is volatile. In less affective situations, it may serve to temporarily block negative feelings and reduce the likelihood of the person being overwhelmed, thereby reducing the likelihood of IPV. Nevertheless, this leads to a built up of suppressed shame and rage. Thus, in affectively heightened situations, alexithymia as a coping mechanism often fails and a sudden release of build up negative feelings overwhelms the individual who lashes out in order to defend against the depletion of their sense of self.

While seemingly counteractive, analogous to a raging child’s protest, an adult’s rage not only serves to relief the incapacitating feelings of shame but also serves as a desperate attempt to manage feelings of rejection and regain contact- even if this means forcing an intimate to stay. Perpetrating violence against one’s intimate from whom love is most desired, reveals the grave extent of the perpetrator’s inability to tolerate painful emotions (Brown et al., 2010). As an adult however, a level of emotional maturity is expected, and protesting in the form of IPV, is not only unacceptable, but no longer motivates a soothing response from others. Although one’s partner may remain, possibly out of fear, instead of reducing the possibility of future abandonment as the raging adult ironically hopes, aggression likely encourages further rejection and possibly eventual abandonment.

Empirically, research demonstrating direct links between shame and aggression as well as alexithymia and aggression have been reported. Specifically, the pathway of shame to hostility has been documented through clinical observations (e.g., Kinston, 1987; Lewis, 1971; Nathanson, 1987; Retzinger, 1987; Scheff, 1987 as cited in Tangney et al., 1992) as well as research associating shame with arousing anger and indirect expressions of aggression

(Tangney, 1990). Other studies have concluded that feelings of shame differentiated persons who were abusive within their relationships to those who were not abusive (Harmon, 2002). Although the concept of alexithymia has been recognised by researchers for some time to be a potentially important influencing factor in violence (Brown, 2010; Keltikangas-Jarvinen, 1982; Yelsma, 1996), few studies have explored it in relation to IPV. In one of the few studies nonetheless, Yelsma's (1996) reported that perpetrators of IPV experienced significantly higher levels of alexithymia than functional spouses and were less able to own or express their feelings. On a whole, separate studies have provided evidence for the direct influence of shame and alexithymia on IPV perpetration as well as rejection and IPV illustrated earlier. Given the complexity of IPV however, it is unlikely that the relationship between risk factors and IPV is so simple. For that reason, this paper chose to explore a circular rejection-abuse model (Brown et al., 2010) of IPV.

Piecing together the foregoing discussions, the rejection-abuse pathway has been described. Specifically, adapting from Brown and colleagues (2010) study, it is posited that (1) An anxiously attached individual experiences an intimate's behaviour as rejecting that triggers reminders of past attachment trauma; (2) The individual's sense of self is threatened, evoking feelings of shame; (3) The individual uses alexithymia to defend against this threat; (4) Alexithymia not only fails to alleviate emotional pain during intense conflict but also has the effect of desensitizing an individual from their feelings. Thereby paving the way and resulting in IPV perpetration; (5) IPV itself exacerbates rejection from a partner thereby maintaining the RAC. In their pilot study on 66 male batterers, Brown et al., (2010) found evidence supporting the RAC model where: rejection (measured via variables of anxious attachment and harsh punishment experienced in childhood) led to a person's sense of self being threatened (measured via variables of shame and a sense of self), which led to defence against threat (measured via alexithymia), and finally led to the abuse variable of

psychological aggression. Ultimately, psychological abuse led to rejection again, supporting the circularity of the proposed model.

Notably, Brown et al.'s (2010) study could not test the model on physical abuse due to the low levels of physical assault reported by their sample. Particularly, Brown et al. (2010) posited that being involved in treatment at the time likely deterred participants from perpetrating physical assault. As a result, physical assault was removed as a measure in their study, and their conclusions were based purely on psychological aggression.

Based on Brown et al.'s (2010) results, further research may benefit from exploring an extreme group of perpetrators. This is particularly necessary to ascertain the validity of the RAC on more severe forms of physical IPV. One such sample is a prison population. In addition to increasing the likelihood of measuring physical IPV, a prison sample increases the probability of assessing individuals with vulnerable attachments. Specifically, early dysfunctions in attachment relationships are believed to be the foundation of borderline personality development (Dozier, Stovall-McClough, & Albus, 2008) and widespread research has reported associations between borderline personality features and IPV perpetration in men (Ross & Babcock, 2009; Costa & Babcock, 2008; Ehrensaft, Cohen, & Johnson, & Chen 2006; Holtzworth-Munroe & Stuart, 1994; Tweed & Dutton, 1998; Ross, 2011; Walsh, Swogger, O'Connor, Schonbrun, Shea, & Stuart, 2010) and in women (Ross, 2011; Hughes, Stuart, Gordon, & Moore, 2007; Walsh et al., 2010). Because the severity of IPV is linked to one's level of pathology (Edwards, Holden, Felitti, & Anda, 2003; Lawson, Weber, Beckmer, Robinson, Marsh, & Cool, 2003), forensic institutions are believed to house the highest concentration of IPV perpetrators with borderline personalities (Mauricio & Tein, 2007). Thus, to increase the probability of including individuals who perpetrate severe levels of violence stemming from vulnerabilities in attachment, it is purported that a prison sample is ideal for testing out the RAC model. In addition, the RAC model was originally proposed to explain men's violence. As such, evidence supporting the RAC model primarily stems from

male data. However, for reasons already discussed, it is believed that nested in attachment theory, this model will apply across gender to explain female violence. Thus, given the paucity in models to explain female IPV, research exploring the applicability of the RAC model to female perpetration is worthwhile.

2.4 Summary

For the longest time, IPV has been understood as heinous men on women violence born against a backdrop of patriarchal societies. As a result, men have been treated in programs targeting power and control issues in isolation of relational and psychological risk factors. It is now clear that patriarchal intervention programs yield limited success. Yet, alternative conceptualisations of IPV have been met with resistance because of: fear that women's rights will be lost; or that IPV behaviour will be inaccurately rationalised if developmental or psychological factors underlying perpetrating behaviours are explored. Nevertheless, with evidence that IPV is often reciprocal and that women are capable of perpetrating brutal forms of IPV, it is puzzling that a patriarchal conceptualisation of IPV continues to direct intervention programs. Researchers have lobbied for an expansion of existing conceptualisations to include other theories; and of existing theories, attachment theory has been highlighted to have the most potential. As such, this paper expanded upon the theoretical underpinnings of an attachment based RAC model of IPV that cut across gender and culture. The exploration of an attachment framework intended to underscore that IPV cannot be treated in isolation from relational and psychological factors. Furthermore, with continued attachment-based IPV research, potential integration of attachment with existing patriarchal frameworks may ultimately lead to better prevention and interventions for IPV.

References

- Ainsworth, M. D. S., Blehar, M. C., Waters, E., & Wall, S. (1978). *Patterns of Attachment: A Psychological Study of the Strange Situation*. Hillsdale, NJ: Erlbaum.
- Archer, J. (2000). Sex differences in aggression between heterosexual partners: A meta-analytic review. *Psychological Bulletin*, 126(5), 651-680. doi: 10.1037//0033-2909.126.5.651
- Australian Bureau of Statistics (2006). *Personal Safety Survey, Australia, 2005. reissue, cat no. 4906.0*. Australian Bureau of Statistics, Canberra.
- Australian Institute of Health and Welfare (2011) *Australia's welfare 2011. Australia's welfare series*, Australian Institute of Health and Welfare, Canberra.
- Babcock, J. C., Green, C. E., & Robie, C. (2004). Does batterers' treatment work? A meta-analytic review of domestic violence treatment. *Clinical Psychology Review*, 23(8), 1023-1053. doi: 10.1016/j.cpr.2002.07.001
- Babcock, J., C., Jacobson, N. S., Gottman, J., M., & Yerington, T., P. (2000). Attachment, emotional regulation, and the function of marital violence: Differences between secure, preoccupied, and dismissing violent and nonviolent husbands. . *Journal of Family Violence*, 15(4), 391-409.
- Bartholomew, K., Henderson, A., & Dutton, D. (2001). Insecure Attachment and Partner Abuse. In C. Clulow (Ed.), *Adult Attachment and Couple Psychotherapy*, Hove, East Sussex: Brunner-Routledge.
- Black, M. C., Basile, K. C., Breiding, M. J., Smith, S. G., Walters, M. L., Merrick, M. T., . . . Stevens, M. R. (2011). *The National Intimate Partner and Sexual Violence Survey (NISVS): 2010 Summary Report*. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention.
- Bowlby, J. (1969). *Attachment and loss: Attachment*. New York, NY: Basic Books.
- Bowlby, J. (1973). *Attachment and loss: Separation, Vol. 2*. New York, NY: Basic Books.

- Bowlby, J. (1980). *Attachment and loss: Vol. 3*. New York, NY: Basic Books.
- Brennan, K., A., Clark, C., L., & Shaver, P., R. (1998). Self-report measurement of adult attachment: An integrative overview. In J. Simpson, A. & S. Rholes, W. (Eds.), *Attachment theory and close relationships*. New York: The Guilford Press A Division of Guilford Publications, Inc.
- Broussard, E. R. (1995). Infant attachment is a sample of adolescent mother. *Child Psychiatry and Human Development*, 25, 211–219.
- Brown, J. (2012). Male perpetrators, the gender symmetry debate, and the rejection-abuse cycle: implications for treatment. *American journal of men's health*, 6(4), 331-343. doi: 10.1177/1557988312439404
- Brown, J., James, K., & Taylor, A. (2010). Caught in the rejection-abuse cycle: are we really treating perpetrators of domestic abuse effectively? *Journal of Family Therapy*, 32(3), 280-307. doi: 10.1111/j.1467-6427.2010.00494.x
- Caetano, R., Vaeth, P. A. C., & Ramisetty-Mikler, S. (2008). Intimate Partner Violence Victim and Perpetrator Characteristics Among Couples in the United States. *Journal of Family Violence*, 23(6), 507-518. doi: 10.1007/s10896-008-9178-3
- Campbell, J. C. (2002). Safety planning based on lethality assessment for partners of batterers in intervention programs. *Journal of Aggression, Maltreatment, and Trauma*, 5(2), 129-143.
- Campbell, J. C., Baty, M. L., Laughon, K., & Woods, A. (2009). Health effects of partner violence: Aiming toward prevention. In D. J. Whitaker & J. R. Lutzker (Eds.), *Preventing partner violence: Research and evidence-based intervention strategies*. (Vol. viii, 300 pp, pp. 113-138). Washington, DC, US: American Psychological Association.

- Carlson, B. E. (2000). Children Exposed to Intimate Partner Violence: Research Findings and Implications for Intervention. *Trauma, Violence, & Abuse, 1*(4), 321-342. doi: 10.1177/1524838000001004002
- Carney, M. M., & Buttell, F. P. (2005). Exploring the relevance of attachment theory as a dependent variable in the treatment of women mandated into treatment for domestic violence offenses. *Journal of Offender Rehabilitation, 41*(4), 33-61. doi: 10.1300/J076v41n04_02
- Carney, M., Buttell, F., & Dutton, D. (2007). Women who perpetrate intimate partner violence: A review of the literature with recommendations for treatment. *Aggression and Violent Behavior, 12*(1), 108-115. doi: 10.1016/j.avb.2006.05.002
- Cassidy, J., & Shaver, P. R. (1999). *Handbook of attachment: Theory, research, and clinical applications*. New York: Guilford Press.
- Centers for Disease Control and Prevention. (2012). *Intimate partner violence: Risk and protective factors*. National Center for Injury Prevention and Control, Division of Violence Prevention, Retrieved from <http://www.cdc.gov/violenceprevention/intimatepartnerviolence/riskprotectivefactors.html>.
- Centers for Disease Control and Prevention. (2013). *Intimate partner violence: Definitions*. Retrieved from <http://www.cdc.gov/violenceprevention/intimatepartnerviolence/definitions.html>
- Chan K. (2005). *Study on Child Abuse and Spouse Battering: Report on Findings of Household Survey*. Department of Social Work & Social Administration. The University of Hong Kong: Hong Kong.
- Chan, A. & Payne, J. (2013). *Homicide in Australia: 2008–09 to 2009–10 National Homicide Monitoring Program annual report*. Monitoring report, no. 21, Australian Institute of Criminology, Canberra.

- Charles, D., Whitaker, D. J., Le, B., Swahn, M., & DiClemente, R. J. (2011). Differences Between Perpetrators of Bidirectional and Unidirectional Physical Intimate Partner Violence. *Partner Abuse*, 2(3), 344-364. doi: 10.1891/1946-6560.2.3.344
- Cheong, C. W., & Bong, B. (2010). *International violence against women survey: The Singapore Report*. Retrieved from <http://www.ncss.gov.sg/VWOcorner/abstracts.asp>.
- Choi, A., & Edleson, J. L. (1995). Advocating Legal Intervention in Wife Assaults: Results From a National Survey of Singapore. *Journal of Interpersonal Violence*, 10(3), 243-258. doi: 10.1177/088626095010003001
- Coker, A. L., Smith, P. H., Bethea, L., King, M. R., & McKeown, R. E. (2000). Physical health consequences of physical and psychological intimate partner violence. *Archives of Family Medicine*, 9, 451-457.
- Compassion Power. (2013) *Statistics*. Retrieved from <http://compassionpower.com/statistics.php>
- Corvo, K., & Johnson, P. J. (2012). An Eye for an Eye: Gender Revanchisme and the Negation of Attachment in Domestic Violence Policy. *Partner Abuse*, 3(1), 89-106. doi: 10.1891/1946-6560.3.1.89
- Corvo, K., Dutton, D., & Chen, W. Y. (2009). Do Duluth Model Interventions With Perpetrators of Domestic Violence Violate Mental Health Professional Ethics? *Ethics & Behavior*, 19(4), 323-340. doi: 10.1080/10508420903035323
- Costa, D. M., & Babcock, J. C. (2008). Articulated thoughts of intimate partner abusive men during anger arousal: Correlates with personality disorder features. *Journal of Family Violence*, 23, 395-402.
- Davis, R. C., Taylor, B. G., & Maxwell, C. D. (2000). *Does batterer treatment reduce violence? A randomized experiment in Brooklyn*. Washington, DC: National Institute of Justice.

- DeKeseredy, W. S., Saunders, D. G., Schwartz, M. D., & Alvi, S. (1997). The meanings and motives for women's use of violence in Canadian college dating relationships: Results from a national survey. *Sociological Spectrum*, 17, 199-222.
- DeKeseredy, W., & Schwartz, M. (1998, February). Measuring the extent of women abuse in intimate heterosexual relationships: A critique of the Conflict Tactics Scales. Harrisburg, PA: VAWnet, a project of the National Resource Center on Domestic Violence/ Pennsylvania Coalition Against Domestic Violence. Retrieved from <http://vawnet.org>.
- Department of Statistics, Ministry of Trade and Industry, Republic of Singapore. (2010). *Census of population 2010: Advance census release*. Singapore: Author.
- Department of Statistics, Ministry of Trade and Industry, Republic of Singapore. (2012). *Population trends 2012*. Singapore: Author.
- Desmarais, S. L., Reeves, K. A., Nicholls, T. L., Telford, R. P., & Fiebert, M. S. (2012). Prevalence of physical violence in intimate relationships: Part 2. Rates of male and female perpetration. . *Partner Abuse*, 3(2), 170-198.
- Dobash, R. E., & Dobash, R. P. (1977). Wives: The appropriate victims of marital violence. *Victimology*, 2, 426-442.
- Dobash, R. E., & Dobash, R. P. (1979). *Violence against Wives*. . New York: The Free Press.
- Domestic abuse intervention programs. (2009) *Annual report 2009*. USA: Author.
- Dowd, L. (2001). Female perpetrators of partner aggression: Relevant issues and treatment. *Journal of Aggression, Maltreatment, and Trauma*, 5(73-104).
- Dozier, M., Stovall-McClough, K. C, & Albus, K. E. (2008). Attachment and psychopathology in adulthood. In J. Cassidy & P.R. Shaver (Ed), *Handbook of attachment: Theory, research, and clinical applications* (2nd ed.). (pp. 718-744). New York, NY, US: Guilford Press.

- Dunphy, L. (2001). Families on the brink, on the edge. In P. Munhall & V. Fitzsimons (Eds.), *The emergence of the family into the 21st century* (pp. 3–15). Mississauga: Jones & Barlett Publishers.
- Dutton, D. (2003). Treatment of assaultiveness. *Journal of Aggression, Maltreatment & Trauma*, 7(1-2), 7-28. doi: 10.1300/J146v07n01_02
- Dutton, D. G., & Corvo, K. (2007). The Duluth model: A data-impervious paradigm and a failed strategy. *Aggression and Violent Behavior*, 12(6), 658-667. doi: 10.1016/j.avb.2007.03.002
- Dutton, D., G., Saunders, K., Starzomski, A., & Bartholomew, K. (1994). Intimacy-anger and insecure attachment as precursors of abuse in intimate relationships. *Journal of Applied Social Psychology*, 24(15), 1367-1386.
- Edwards, V. J., Holden, G. W., Felitti, V. J., & Anda, R. F. (2003). Relationship between multiple forms of childhood maltreatment and adult mental health in community respondents: results from the adverse childhood experiences study. *American Journal of Psychiatry*, 160, 1453 -1460.
- Ehrensaft, M. K., Cohen, P., Johnson, J., & Chen, H. (2006). Development of personality disorder symptoms and the risk for partner violence. *Journal of Abnormal Psychology*, 474-483.
- Enabling Change Rebuilding Lives (EACH). (2009). Government Office for London. *Asian women, domestic violence and mental health. A toolkit for health professionals*. London: Author.
- Ending Violence Against Women—Population Reports. (December 1999). Series L, Number 11. *Center for Health and Gender Equity (CHANGE)*.
- Evren, C., Sar, V., Evren, B., Semiz, U., Dalbudak, E., & Cakmak, D. (2008). Dissociation and alexithymia among men with alcoholism. *Psychiatry and Clinical Neurosciences*, 62(1), 40-47.

- Feazelle, C. S., Mayers, R. S., & Deschner, J. P. (1984). Services for men who batter: Implications for programs and policies. *Family Relations*, 33, 217-223.
- Feder, L., & Forde, D. (2000). *A test of the efficacy of court-mandated counseling for domestic violence offenders: The Broward experiment*. Washington: National Institute of Justice. NCJ 184752.
- Fiebert, M. M. (2010). References examining assaults by women on their spouses or male partner: an annotated bibliography. *Sexuality and Culture*, 14, 49-91.
- Finkelhor, D., Ormrod, R., Turner, H., & Hamby, S. L. (2005). The victimization of children and youth: a comprehensive, national survey. *Child maltreatment*, 10(1), 5-25. doi: 10.1177/1077559504271287
- Fonagy, P. (1999). Psychoanalytic theory from the viewpoint of attachment theory and research. In J. Cassidy & P. Shaver (Eds.), *Handbook of attachment theory and research*. pp. 595-624. New York: Guilford Press.
- Fonagy, P. (2004). The developmental roots of violence in the failure of mentalization. In F. Pfäfflin & G. Adshead (Eds.), *A Matter of Security: The Application of Attachment Theory to Forensic Psychiatry and Psychotherapy* (pp. 13-56). London & New York: Jessica Kingsley Publishers Ltd.
- Foo, C. L., & Seow, E. (2005a). Domestic violence in Singapore: A ten year comparison of victim profile. *Singapore Medical Journal*, 46(2), 69-73.
- Foo, C. L., & Seow, E. (2005b). A comparison between male and female victims of domestic violence presenting to an emergency department in Singapore [Abstract]. *Academic Emergency Medicine*, 12(Supplement s1), 47.
- Frieze, I. H. (2005). Female violence against intimate partners: An introduction. *Psychology of Women Quarterly*, 29, 229-237.
- Ganapathy, N. (2006). The operational policing on domestic violence in Singapore: An exploratory study. *International Criminal Justice Review*, 16, 179-198.

- Gergely, G., & Watson, J. S. (1996). The social biofeedback theory of parental affect-mirroring: The development of emotional self awareness and self-control in infancy. *International Journal of Psychoanalysis*, 77, 1181-1212.
- Gilligan, R. (1997). Beyond permanence? The importance of resilience in child placement practice and planning. *Adoption and Fostering*, 21(1), 12-20.
- Grabe, H. J., Rainermann, S., Spitzer, C., Gansicke, M., & Freyberger, H. J. (2000). The relationship between dimensions of alexithymia and dissociation. *Psychotherapy and Psychosomatics*, 69, 128-131.
- Gray, H., & Foshee, V. (1997). Adolescent dating violence: Differences between one-sided and mutually violent profiles. *Journal of Interpersonal Aggression*, 12, 126–141.
- Gregory, C., & Erez, E. (2002). The effects of batterer intervention programs: The battered women's perspectives. *Violence Against Women*, 8(2), 206-232.
- Grossman, K., Grossman, K. E., Spangler, G., Suess, G., & Unzner, L. (1985). Maternal sensitivity and newborns' orientation responses as related to quality of attachment in northern Germany. *Monographs of the Society for Research in Child Development*, 50(1-2), 233-256.
- Hamberger, L. K., & Guse, C. E. (2002). Men's and women's use of intimate partner violence in clinical samples. . *Violence Against Women*, 8(11), 1301-1331.
- Harmon, P. A. (2002). Why do men batter women? Assessing empathy, self-regard and narcissism levels, and attitudes toward women, men's roles and family of origin experiences among middle to upper class male batterers. *Dissertation Abstracts International. Section B: The Sciences and Engineering*, 62 (12-B), 6023.
- Hazan, C., & Shaver, P. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology*, 52, 511–524.
- Hazan, C., & Shaver, P. (1994). Attachment as an organizational framework for research on close relationships. *Psychological Inquiry*, 5(1), 1-22.

- Henderson, A. J. Z., Bartholomew, K., Trinke, S. J., & Kwong, M. J. (2005). When loving means hurting: An exploration of attachment and intimate abuse in a community sample. *Journal of Family Violence*, 20(4), 219-230. doi: 10.1007/s10896-005-5985-y
- Henning, K., Renauer, B., & Holdford, R. (2006). Victim or offender? Heterogeneity among women arrested for intimate partner violence. *Journal of Family Violence*, 21, 351-368.
- Hesse, E., Main, M., Yost-Abrams, K. & Rifkin, A. (2003) Unresolved states regarding loss or abuse can have "second generation" effects: Disorganization, role inversion and frightening ideation in the offspring of traumatized, non- maltreating parents. In M. Soloman & D. Seigal, (Eds.). *Healing Trauma: Attachment, Mind, Body and Brain*. New York: Norton.
- Holtzworth-Monroe, A., Meehan, J. C., Herron, K., Rehman, U., & Stuart, G. L. (2000). Testing the Holtzworth-Monroe and Stuart (1994) batterer typology. *Journal of Consulting and Clinical Psychology*, 68, 1000-1019.
- Holtzworth-Munroe, A., & Stuart, G. L. (1994). Typologies of male batterers: Three subtypes and the differences among them. *Psychological Bulletin*, 116(3), 476-497.
- Holtzworth-Munroe, A., Stuart, G. L., & Hutchinson, G. (1997). Violent versus nonviolent husbands: Differences in attachment patterns, dependency and jealousy. *Journal of Family Psychology*, 11(3), 314-331.
- India tackles domestic violence. (2006, October 26). *BBC News*. Retrieved from http://news.bbc.co.uk/2/hi/south_asia/6086334.stm
- Johnson, M. P. (1995). Patriarchal terrorism and common couple violence: Two forms of violence against women. *Journal of Marriage and the Family*, 57, 283-294.
- Johnson, M. P. (2006). Conflict and control: gender symmetry and asymmetry in domestic violence. [Review]. *Violence against women*, 12(11), 1003-1018. doi: 10.1177/1077801206293328

- Jongwilaiwan, R., & Thompson, E. C. (2011). Thai wives in Singapore and transnational patriarchy. *Gender, Place and Culture: A Journal of Feminist Geography*, 1-19. doi: 10.1080/0966369x.2011.624588
- Karen, R. (1977). *Becoming attached: Unfolding the mystery of the mother-infant bond and its impact on later life*. New York, NY: Warner Books.
- Kelly, J. B., & Johnson, M. P. (2008). Differentiation among types of intimate partner violence: Research update and implications for interventions. *Family Court Review*, 46(3), 476-499.
- Keltikangas-Jarvinen, L. (1982). Alexithymia in violent offenders. *Journal of Personality Assessment*, 46(462-467).
- Kimmel, M., S. (2002). "Gender symmetry" in domestic violence. A substantive and methodological research review. *Violence against women*, 8(11), 1332-1363. doi: 10.1177/107780102237407
- Kitano, H. & Kikumura, A. (1976). The Japanese American family. In C.H. Mindel & R.W. Havenstein (Eds.), *Ethnic families in America*. New York: Elsevier.
- Klaus, P. A. (Feb 2004). Crime and the nation's households, 2002. *Bureau of Justice Statistics Bulletin*.
- Kobak, R., & Sceery, A. (1988). Attachment in late adolescence: Working models, affect regulation, and representations of self and others. *Child Development*, 59, 135-146.
- Koss, M. P., Bailey, J. A., Yuan, N. P., Herrera, V. M., & Lichter, E. L. (2003). Depression and PTSD in survivors of male violence: Research and training initiatives to facilitate recovery. *Psychology of Women Quarterly*, 27, 130-142.
- Labriola, M., Rempel, M., & Davis, R. C. (2005). *Testing the effectiveness of batterer programs and judicial monitoring: Results from a randomized trial. Final report submitted to the National Institute of Justice*. New York: Center for Court Innovation.

- Lambert, M. J. (1992) Psychotherapy Outcome Research: Implications for Integrative and Eclectic Therapists in Norcross, C. and Goldfried, M. (Eds) *Handbook of Psychotherapy Integration*, Basic Books, United States.
- Langhinrichsen-Rohling, J. (2009). Controversies involving gender and intimate partner violence in the United States. *Sex Roles*, 62(3-4), 179-193. doi: 10.1007/s11199-009-9628-2
- Langhinrichsen-Rohling, J., Neidig, P., & Thorn, G. (1995). Violent marriages: Gender differences in levels of current violence and past abuse. *Journal of Family Violence*, 10, 159–176.
- Langhinrichsen-Rohling, J., Selwyn, C., & Rohling, M. L. (2012). Rates of Bidirectional Versus Unidirectional Intimate Partner Violence Across Samples, Sexual Orientations, and Race/Ethnicities: A Comprehensive Review. *Partner Abuse*, 3(2), 199-230. doi: 10.1891/1946-6560.3.2.199
- Laroche, D. (2005). *Aspects of the context and consequences of domestic violence - Situational couple violence and intimate terrorism in Canada in 1999*. Quebec: Government of Quebec: Institut de la statistique du Québec.
- Lawson, D. (2003). Incidence, explanations, and treatment of partner violence. *Journal of Counseling and Development*, 81, 19-32.
- Lawson, D. M., Weber, D., Beckner, H. M., Robinson, L., Marsh, N., & Cool, A. (2003). Men who use violence: Intimate violence versus non-intimate violence profiles. *Violence and Victims*, 18, 259-277.
- Lenton, R. L. (1995). Power versus feminist theories of wife abuse. *Canadian Journal of Criminology*, 37, 305–330.
- Levinson, A., & Fonagy, P. (2004). Offending and Attachment: The Relationship between Interpersonal Awareness and Offending in a Prison Population with Psychiatric Disorder. *Canadian Journal of Psychoanalysis*, 12, 225-251.

- Martin, M. (1997). Double your trouble: Dual arrest in family violence. *Journal of Family Violence, 12*, 139-157.
- Mauricio, A. M., Tein, J., & Lopez, F. G. (2007). Borderline and antisocial personality scores as mediators between attachment and intimate partner violence. *Violence and Victims, 22*(2), 139-157.
- Mayseless, O. (1991). Adult attachment patterns and courtship violence. *Family Relations, 40*(1), 21-28.
- McCollum, E. E., & Stith, S. M. (2008). Couples treatment for interpersonal violence: A review of outcome research literature and current clinical practices. *Violence and Victims, 23*(2), 187-201.
- Melton, H. C., & Belknap, J. (2003). He hits, she hits: Assessing gender differences and similarities in officially reported intimate partner violence. *Criminal Justice and Behavior, 30*(3), 328-248. doi: 10.1177/0093854803030003004
10.1177/0093854803252356
- Mihalic, S. W., & Elliott, D. (1997). A social learning theory model of marital violence. *Journal of Family Violence, 12*, 21-47.
- Mikulincer, M. (1998). Adult attachment style and affect regulation: Strategic variations in self-appraisals. *Journal of Personality and Social Psychology, 75*(2), 420-235.
- Mikulincer, M., & Nachshon, O. (1991). Attachment styles and patterns of self-disclosure.. *Journal of Personality and Social Psychology, 61*, 321-331.
- Mikulincer, M., Florian, M., Cowen, P. A., & Cowen, C. P. (2002). Attachment security in couple relationships: A systematic model and its implications for family dynamics. *Family Process, 41*(3), 405-434.

Ministry of Community Development, Youth and Sports, Republic of Singapore. (2008).

Singapore's fourth periodic report to the UN committee for the convention on the elimination of all forms of discrimination against women. Retrieved from

app.msf.gov.sg/Portals/0/Files/CEDAW/Singapore%27s%204th%20Periodic%20CEDAW%20Report%20(Mar%202009)_MCYS%20Website.pdf

Miyake, K., Chen, S., & Campos, J. J. (1985). Infant temperament, mother's mode of interaction, and attachment in Japan: An interim report. *Monographs of the Society for Research in Child Development*, 50(1-2), 276-297.

T.E. Moffitt, R.W. Robins, A. Caspi. (2001). A couples analysis of partner abuse: Prevention policy. *Criminology & Public Policy*, 1(1), 5–36.

Morton, N., & Browne, K. D. (1998). Theory and observation of attachment and its relation to child maltreatment: A review. *Child Abuse & Neglect*, 22(11), 1093-1104.

Nathanson, D. L. (1992). *Shame and Pride: Affect, Sex, and the Birth of the Self*. New York: W.W. Norton.

National Crime Prevention. (2001) *Young people and domestic violence: national research on young people's attitudes and experiences of domestic violence*. Crime Prevention Branch of the Commonwealth Attorney-General's Department, Canberra.

Nemiah, J. C., Freyberger, H., & Sifneos, P. E. (1976). Alexithymia: A view of the psychosomatic process. In O. Hill (Ed.), *Modern trends in psychosomatic medicine* (pp. 430-439). London & Boston: Butterworth.

Orcutt, H. K., Garcia, M., & Pickett, S. M. (2005). Female-perpetrated intimate partner violence and romantic attachment style in a college student sample. *Violence and Victims*, 20(3), 287-302.

- Peeks, A. S. (2006). *The sexual experiences of heterosexual college males: Examining components of sexual aggression*. (Doctoral dissertation, The University of Nebraska - Lincoln). Retrieved from <http://ezproxylocal.library.nova.edu/login?url=http://search.proquest.com/docview/305291912?accountid=6579>.
- Pence, E., & Paymar, M. (1986). *Power and control: Tactics of men who batter*. Duluth MN: Minnesota Program Development, Inc.
- Pence, E., & Paymar, M. (1993). *Education groups for men who batter*. . London: Springer.
- Plichta, S. B. (2004). Intimate partner violence and physical health consequences: policy and practice implications. *Journal of Interpersonal Violence*, 19(1), 1296-1323.
- Raj, A., Livramento, K. N., Santana, M. C., Gupta, J., & Silverman, J. G. (2006). Victims of intimate partner violence more likely to report abuse from in-laws. *Violence Against Women*, 12(10), 936-946.
- Rajeckia, D. W., E., L. M., & P., O. (1978). Toward a general theory of infantile attachment: a comparative review of aspects of the social bond. *Behavioral and Brain Sciences*, 1(3), 417-436.
- Reno, J., Marcus, D., Leary, M. L., & Samuels, J. E. (2000). Full report of the prevalence, incidence, and consequences of violence against women: Findings from the National Violence Against Women Survey.
- Roberts, N., & Noller, P. (1998). The Associations between Adult Attachment and Couple Violence: The Role of Communication Patterns and Relationship Satisfaction. In J.A. Simpson & W.S. Rholes (Eds.), *Attachment Theory and Close Relationships*. pp. 317-352. New York: Guilford Press.

- Rodwell, L., & Smith, N. (2008). *An evaluation of the NSW Domestic Violence Intervention Court Model*. Retrieved from NSW Bureau of Crime Statistics and Research website [http:// www.lawlink.nsw.gov.au/lawlink/bocsar/ll_bocsar.nsf/vwFiles/R58.pdf/\\$file/R58.pdf](http://www.lawlink.nsw.gov.au/lawlink/bocsar/ll_bocsar.nsf/vwFiles/R58.pdf/$file/R58.pdf).
- Rosenbaum, A., & Leisring, P. A. (2003). Beyond power and control: Towards an understanding of partner abusive men. *Journal of Comparative Studies*, 34(1), 7-16.
- Ross, J. M. (2011). Personality and situational correlates of self-reported reasons for intimate partner violence among women versus men referred for batterers' intervention. *Behavioral sciences & the law*, 29(5), 711-727. doi: 10.1002/bsl.1004
- Ross, J. M., & Babcock, J. C. (2007, November). Antecedents to partner violence for antisocial versus borderline men. In R. E. Samper (Chair), *Psychopathology and intimate partner violence*. Symposium conducted at the Association for Behavioral and Cognitive Therapy Annual Convention, Philadelphia, PA.
- Ross, J. M., & Babcock, J. C. (2009). Proactive and Reactive Violence among Intimate Partner Violent Men Diagnosed with Antisocial and Borderline Personality Disorder. *Journal of Family Violence*, 24(8), 607-617. doi: 10.1007/s10896-009-9259-y
- Ross, J. M., & Babcock, J. C. (2010). Gender and intimate partner violence in the United States: Confronting the controversies. *Sex Roles*, 62(3-4), 194-200. doi: 10.1007/s11199-009-9677-6
- Ross, T., & Pfäfflin, F. (2007). Attachment and interpersonal problems in a prison environment. *Journal of Forensic Psychiatry & Psychology*, 18(1), 90-98. doi: 10.1080/14789940601063345
- Rothbaum, F., Weisz, J., Pott, M., Miyake, K., & Morelli, G. (2001). Deeper into attachment and culture. *American Psychologist*, 56, 827– 828.
- Saunders, P. (2002). *The Ends and Means of Welfare: Coping with Economic and Social Change in Australia*. Cambridge: Cambridge University Press.

- Seow, E., & Foo, C. L. (2006). A profile of male domestic violence victims presenting to an emergency department in Singapore. *Hong Kong Journal of Emergency Medicine*, 13(4), 212-216.
- Seow, E., Wong, H. P., Low, B. Y., Anantharaman, V., & Ooi, S. (1995). Battered women: Presentation at A and E departments in Singapore. *Asia-Pacific Journal of Public Health*, 8(2), 114-117.
- Shaver, P. R., & Mikulincer, M. (2003, May). *Attachment, compassion, and altruism*. Paper presented at the Conference on Compassionate Love, Normal, IL.
- Sifneos, P. E. (1973). The prevalence of alexithymic characteristics in psychosomatic patients. *Psychotherapy and Psychosomatics*, 26(270-285).
- Singapore Government (1991), *Shared Values*. Singapore: Singapore National Printers.
- Singapore Subordinate Courts (1998). A profile of family violence in Singapore. *Subordinate Courts Research Bulletin*, Retrieved from www.gov.sg/judiciary/subct
- Smith, M. D. (1987). The incidence and prevalence of woman abuse in Toronto. *Violence and Victims*, 2, 173-187.
- Society Against Family Violence (SAFV). (2008). *Singapore's response to family violence: 1997-2007- What comes next? Accessibility & dissemination*. Retrieved from <http://www.spp.nus.edu.sg>.
- Sonkin, D. J., & Dutton, D. (2003). Treating assaultive men from an attachment perspective. *Journal of Aggression, Maltreatment & Trauma*, 7(1-2), 105-133. doi: 10.1300/J146v07n01_06
- Stark, E. (1995). "Re-Presenting Woman's Battering: From Battered Woman Syndrome to Coercive Control. *Albany Law Review*, 58, 973-1026.
- Stark, E. (2007). *Coercive control: How men entrap women in personal life*. New York: Oxford University Press.

- Stern, D. N. (1998). *The motherhood constellation: A unified view of parent-infant psychotherapy*. London: Karnac Books.
- Stosny, S. (1995). *Treating attachment abuse: A compassionate approach*. New York: Springer Publishing Company.
- Straus, M. A. (2004). Prevalence of violence against dating partners by male and female university students worldwide. *Violence Against Women*, 10(7), 790-811. doi: 10.1177/1077801204265552
- Straus, M. A. (2008). Dominance and symmetry in partner violence by male and female university students in 32 nations. *Children and Youth Services Review*, 30(3), 252-275. doi: 10.1016/j.chilyouth.2007.10.004
- Straus, M. A. (2011). Gender symmetry and mutuality in perpetration of clinical-level partner violence: Empirical evidence and implications for prevention and treatment. *Aggression and Violent Behavior*, 16(4), 279-288. doi: 10.1016/j.avb.2011.04.010
- Straus, M. A., & Gozjolko, K. L. (in press). "Intimate terrorism" and injury of dating partners by male and female university students. *Journal of Family Violence*.
- Straus, M. A., & Mickey, E. L. (2012a). Reliability, validity, and prevalence of partner violence measured by the conflict tactics scales in male-dominant nations. *Aggression and Violent Behavior*. doi: 10.1016/j.avb.2012.06.004
- Straus, M. A., Hamby, S. L., Boney-McCoy, S., & Sugarman, D. B. (1996). The Revised Conflict Tactics Scales (CTS2): Development and Preliminary Psychometric Data. *Journal of Family Issues* 17(3), 283–316.
- Suglia, S. F., Staudenmayer, J., Cohen, S., & Wright, R. J. (2010). Posttraumatic stress symptoms related to community violence and children's diurnal cortisol response in an urban community-dwelling sample. *International Journal of Behavioural Medicine*, 17, 43-50.

- Tan, K., P. (2001). Civic society and the new economy in patriarchal Singapore. *Crossroads: An Interdisciplinary Journal of Southeast Asian Studies*, 15(2), 95-124.
- Tangney, J. P. (1990). Assessing individual differences in proneness to shame and guilt: Development of the self-conscious affect and attribution inventory. *Journal of Personality and Social Psychology*, 59(102-111).
- Tangney, J. P., Wagner, P., Fletcher, C., & Gramzow, R. (1992). Shamed into anger? The relation of shame and guilt to anger and self-reported aggression. *Journal of Personality and Social Psychology*, 62(4), 669-675.
- The Straits Times, Singapore. (Mar 4 2004). My (not so) dear wife: keep away from me - your (not so) loving husband. *The Straits Times*, p.H1.
- Tutkun, H., Savas, H. A., Zoroglu, S. S., Esgü, K., Herken, H., & Tiryaki, N. (2004). Relationship between alexithymia, dissociation and anxiety in psychiatric outpatients from Turkey. *Israel Journal of Psychiatry and Related Sciences* 41(2), 118-124.
- Tweed, R. G., & Dutton, D. G. (1998). A comparison of impulsive and instrumental subgroups of batterers. *Violence and Victims*, 13(3), 217-230.
- U.S Department of Justice. (Feb 2003). *Intimate partner violence, 1993-2001. Bureau of Justice Statistics: Crime data brief*. United States: Author.
- van IJzendoorn, M. H., & Sagi, A. (1999). Cross-cultural patterns of attachment: Universal and contextual dimensions. In J. Cassidy & P. Shaver (Eds.), *Handbook of attachment*. New York: Guilford.
- Walsh, Z., Swogger, M. T., O'Connor, B. P., Schonbrun, Y. C., Shea, T. M., & Stuart, G. L. (2010). Subtypes of partner violence perpetrators among male and female psychiatric patients. *Journal of Abnormal*, 119(563–574). doi: 10.1037/a0019858
- Warner, T. D. (2010). Violent acts and injurious consequences: An examination of competing hypotheses about intimate partner violence using agency-based data. *Journal of Family Violence*, 25, 183–193.

- Whitaker, D. J., Haileyesus, T., Swahn, M., & Saltzman, L. S. (2007). Differences in frequency of violence and reported injury between relationships with reciprocal and nonreciprocal intimate partner violence. [Research Support, N.I.H., Extramural]. *American Journal of Public Health*, 97(5), 941-947. doi: 10.2105/AJPH.2005.079020
- Xu, X., Zhu, F., O'Campo, P., Koenig, M. A., Mock, V., & Campbell, J. (2005). Prevalence of and risk factors for intimate partner violence in China. [Research Support, U.S. Gov't, P.H.S.]. *American journal of public health*, 95(1), 78-85. doi: 10.2105/AJPH.2003.023978
- Yelsma, P. (1996). Affective Orientations of Perpetrators, Victims, and Functional Spouses. *Journal of Interpersonal Violence*, 11(2), 141-161. doi: 10.1177/088626096011002001
- Yoshioka, M. R. Y., Dang, Q., Shewmangal, N., Chan, C., & Tan, C. I. (November 2000). *Asian family violence report: A study of the Chinese, Cambodian, Korean, South Asian and Vietnamese communities in Massachusetts*. Boston, Massachusetts, U.S.A.: Asian Task Force Against Domestic Violence, Inc.

CHAPTER 2.

Exploring and Comparing Patterns of Intimate Partner Violence reported by Male and Female Singapore Prisoners

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Abstract

This study investigated the rates and types of intimate partner violence (IPV) among 75 men and 75 women from a Singapore prison. Women reported higher rates of physical IPV perpetration and victimization than did men. When types of IPV were measured, a roughly equivalent proportion of men and women reported perpetrating controlling as well as non-controlling types of IPV. Although results immediately suggest that women in this extreme sample perpetrated (and hence possibly received) more IPV than did men and that controlling and non-controlling violence was perpetrated equally by both sexes, conclusions in the present study were limited by the poor reliability of men's self-reported physical IPV perpetration. Implications and limitations of the present study as well as recommendations for further research are discussed.

Keywords: Intimate partner violence; situational couple violence; mutual violent control; violent resistance; intimate terrorism

Exploring and Comparing Patterns of Intimate Partner Violence reported by Male and Female Singapore Prisoners

Intimate partner violence (IPV) is a devastating issue worldwide that knows no cultural boundaries. Yet, Singapore still lags behind with only a handful of studies looking at IPV to date (e.g., Cheong & Bong, 2010; Choi & Edleson, 1995; Foo & Seow, 2005a; Foo & Seow, 2005b; Seow, Wong, Low, Anantharaman, Ooi, 1995). IPV is defined as “physical, sexual or psychological harm by a current or former partner or spouse” that can occur between “heterosexual or same-sex couples and does not require sexual intimacy” (Centers for Disease Control and Prevention: CDC, 2013). IPV may differ in frequency and severity and occurs on a “continuum, ranging from one hit that may or may not impact the victim to chronic, severe battering (CDC, 2013). Traditionally, IPV has been conceptualized as an extension of patriarchal values within society in the context of a home where a man is seen as dominant and permitted to do what it takes to control his wife (Dobash & Dobash, 1977). In Singapore, although gender equality is generally practiced within work and education spheres, within the family sphere many men retain patriarchal mindsets and continue to expect wives to remain subservient and to obey them (Jongwilaiwan & Thompson, 2011). It therefore seems incongruous that while IPV research from the West progresses, research from more traditionally patriarchal societies as Singapore remains limited. For this reason, this study set out to contribute to local research by exploring the rates and types of IPV perpetrated by Singaporean inmates. In this paper we first outline the reasons behind the choice of sample before the context of IPV in Singapore is presented. Next, the method used to determine IPV types is described. Last, the findings of the study are discussed and evaluated.

We chose to focus on a prison population for three core reasons. First, IPV has never been studied on a prison population in Singapore. Second, associations between borderline personality features and IPV perpetration in men and women have been well established

(Ross, 2011; Walsh, Swogger, O'Connor, Schonbrun, Shea, & Stuart, 2010). Indeed, it is believed that early dysfunctions in attachment relationships lay the foundation for borderline personality development (Dozier, Stovall-McClough, Albus, Cassidy, & Shaver, 2008), and research has identified prisoners as most likely to suffer attachment difficulties when compared with normal controls or psychiatric patients (Levinson & Fonagy, 2004). Third, having an equally extreme sample of men and women could lead to exploration of gender symmetrical violence in Singapore.

In Singapore, the largest IPV study to date is the International Violence Against Women Survey (IVAWS; Cheong & Bong, 2010). It sampled 2,006 women from Singapore households. The IVAWS reported that, compared with 11 other participating countries, Singapore had one of the lowest previous-year rates of physical (2.1%) and sexual (0.5%) violence victimization (Cheong & Bong, 2010). Although statistics appear encouraging, over 70% of victims did not report IPV incident(s). In reality, results reflect the insularity surrounding IPV within Singaporean society, suggesting that the true prevalence of IPV is likely to be higher than reported. In regard to male victimization, only one study, the International Dating Violence Survey (IDVS; Straus, 2004) that included 31 universities worldwide, was found to report female perpetration rates. The IDVS reported median rates of overall and severe physical assault perpetration over the past year to be 29% and 10% respectively. Specific to 279 Singaporean undergraduates, female perpetration rates were comparable to the median rates at 27.8% and 6.6%; however male perpetration rates were found to be substantively lower than both Singaporean females' rates and the median rates at 11.6% and 1.5% for overall and severe physical assault respectively. Notably, the two aforementioned studies reported sizably discrepant IPV rates. Analyses of methodology suggested that higher percentages in the IDVS were due to the IDVS using the Conflicts Tactics Scale (CTS2; Straus, Hamby, McCoy, & Sugarman, 1996) that captured a broader range of abuse behaviors than that measured in the IVAWS. Nevertheless, regardless of rates,

research underscores that IPV perpetrated by both sexes is a social issue in Singapore. This underlay the decision to explore both men's and women's perpetration in this study.

The particular lack of research examining female IPV perpetration in Singapore is not unfamiliar. Alternatively, it reflects the pattern of research in the broader research field and is arguably an outcome of the longstanding feminist perspective of IPV as one-sided patriarchal violence perpetrated by men (Dobash & Dobash, 1977; Dobash, Dobash, Wilson, & Daly, 1992). Undoubtedly, patriarchy plays a vital role in IPV perpetration (Lenton, 1995; Smith, 1987). However, in the last decades over 200 empirical studies have demonstrated gender equivalent rates of IPV perpetration (Fiebert, 2010). These findings led to a conglomeration of researchers who challenged the traditional feminist view of women as passive victims and an opposing family violence perspective was formed. Family violent researchers refer to data that suggest that both sexes are accountable for IPV and that reasons for perpetrating go beyond patriarchy to include gender-neutral risks (Ross, 2011). Ever since the establishment of the family violence perspective, both perspectives have fervently disputed the gendered nature of IPV.

Noting the limitations of a purely patriarchal or family violence perspective of IPV, Johnson (2006) attempted to explain both male-only and gender symmetrical IPV perpetration by proposing a means of categorizing IPV into four "typologies" based on gender-neutral control motives. Based on post-hoc analyses of 274 women from agencies and community samples in South-western Pennsylvania, Johnson drew several gendered conclusions. *Intimate terrorism* (IT) is the perpetration of controlling violence over a partner who either is non-violent or uses non-controlling violence. IT parallels the one-sided male violence described by feminist researchers and causes the most devastation. *Violent resistance* (VR) is violence perpetrated in self-defense to IT. Consistent with feminist ideology, VR is almost exclusively female-perpetrated. *Mutual violent control* (MVC) is violence perpetrated by both partners with intention of controlling each other. Conclusions on MVC are limited as current

understandings about its dynamics remain inadequate (Kelly & Johnson, 2008). *Situational couple violence* (SCV) is more “commonplace” non-controlling violence that can be one-sided or reciprocal. SCV is purported to stem from an escalation of situational conflicts (Johnson, 1995). While it is less likely to escalate over time, it does have potential to escalate severely (Johnson, 2006; Kelly & Johnson, 2008). SCV parallels gender equivalent perpetration illustrated by family violence researchers. Taken together, Johnson (2006) suggested that one-sided controlling violence is primarily a male phenomenon, that when women are violent they are typically so in self-defense, and when violence is mutual it is often less severe and rarely involves control.

Supporting the efficacy of Johnson’s typologies, studies have reported strong associations between control and IPV perpetration (Johnson & Ferraro, 2000; Straus, 2008). However, researchers such as Straus and Mickey (2012) and Straus and Gozjolko (in press) have challenged Johnson’s view that more severe, controlling types of IPV are primarily male perpetrated. Straus (2011) identified that in five agency samples, IT perpetration rates were comparable across sexes or had higher female than male perpetration. Furthermore, Straus (2011) reported that in 2009, men perpetrated 80% of intimate partner murders and women, albeit a much smaller percentage, were also responsible for 20% of murders.

Nested within the longstanding gender symmetry debate between feminist and family violence researchers, it is unlikely that this disagreement will be resolved soon. Nevertheless, the overwhelming number of studies (over 2,000) that have cited Johnson’s publications to date are evidence of the empirical utility of his typologies. Thus, this study used Johnson’s method of categorizing IPV types not only to acknowledge gender-neutral reasons underlying perpetration and the multidimensionality of IPV but also to allow for straightforward future cross-study comparisons.

The first objective was to investigate the prevalence and frequency rates of IPV perpetration by men and women. The second objective was to determine and compare the

types of IPV perpetration by men and women. Although Singapore generally remains more patriarchal in the family sphere compared to the West, the largest IPV study in Singapore to date found IPV to be perpetrated by both sexes, with slightly more reports of IPV from women. Thus, we based our hypotheses on the emerging family violence perspective that argues gender comparable IPV perpetration for both less and more severe types of violence. We hypothesized that, in Singapore:

1. Both sexes will equally perpetrate controlling and non-controlling violence. That is, men and women will equally perpetrate IT, VR, SCV, and MVC.
2. Both sexes will perpetrate non-controlling types of IPV (SCV) most frequently.

Method

Participants

99 male and 96 female inmates from Changi prison and Changi Women's prison respectively participated in the study. Inmates were included only if they were above 21-years-old and had a minimum secondary school education to ensure English proficiency to comprehend questionnaires. Only inmates incarcerated for general offences were included. Inmates charged for murder or sex offences were excluded. Based on the eligibility criteria, a list of inmates was generated from the each prison's database. From the list, 100 men and 100 women were randomly selected.

Measures

Participants were required to complete a survey package that asked for demographic information and had two questionnaires measuring control and intimate partner violence. Although the following measures were developed in the West, they ask about specific actions to determine how the respondent behaved and do not use ambiguous terms or statements that could vary in meaning across culture. Moreover, the CTS has previously found to be reliable and valid using data from 279 Singaporean university students (Straus, 2004).

Control. Control was measured with The Control Scale (Frankland, 2011). This is a 17-item scale measuring the frequency of coercive control use within an intimate partnership. Each area of control measured including *threats* (e.g., I threatened to reveal my partner's sexuality to others), *intimidation* (e.g., I threatened to hurt or harm my partner), *dominance* (e.g., I monitored my partners time), *economic abuse* (e.g., I controlled or limited my partner's access to money), *emotional abuse* (e.g., I told my partner that they were crazy), and *isolation* (e.g., I made it difficult for my partner to see their friends or family) corresponded to dimensions on Pence and Paymar's (1986) 'Power and Control Wheel'. Items are measured on a scale from 0 (*Never*) to 6 (*More than 20 times*). For each item, participants respond to two questions, the first regarding the frequency of their own control use (self-report) and the second on the frequency of their partner's control use (partner-report). Participants were instructed to think about the past 12 months of their last relationship prior to incarceration when responding. All items are summed to produce a total score. In Frankland's (2011) study, the Cronbach's alphas were .85 for self-reports and .83 for partner-reports. In the present study, reliability coefficients for self-reports and partner reports were .84 and .81 for men, and .71 and .90 for women respectively.

IPV behaviors. IPV behaviors were measured with The Conflict Tactics Scale (CTS2; Straus et al., 1996). This questionnaire has five subscales (Physical Assault, Psychological Aggression, Sexual Coercion, Injury and Negotiation) that measure a total of 39 IPV behaviors that intimate partners engage in. For each behavior item, respondents answer two questions regarding the frequency of the behavior: the first concerning their own perpetration (self-report), and the second concerning their partner's perpetration (partner-report). For each item, participants respond on a scale from 0 (*Never*) to 6 (*More than 20 times*) about the frequency at which they perpetrated IPV in the past 12 months, or could otherwise select 7 (*Not in the last year but before*). The authors reported the subscales' Cronbach's alphas to vary from .79 to .95. The CTS2 is the most widely used scale in research (Desmarais, Reeves,

Nicholls, Telford, & Fiebert, 2012) that allows for cross-study comparisons. For this reason, the CTS2 was the instrument of choice for this study.

In this study, “*prevalence*” (yes or no) scores and “*frequency*” (how often) scores were used for the CTS2. *Lifetime prevalence* scores measured if respondents had ever perpetrated IPV in their lifetime and *past year prevalence* scores measured if respondents perpetrated IPV at least once in the “past 12 months of their last relationship before incarceration”. *Past-year frequency* scores measured how many times respondents perpetrated IPV in the “past 12 months of their last relationship prior to incarceration”.

In this study, only the Physical Assault subscale from the CTS2 was used. The *Physical Assault* scale is a 12-item scale measuring the frequency at which respondents engaged in a range of minor (e.g., “I slapped my partner” or “I grabbed my partner”) to severe (e.g., “I slammed my partner against the wall” or “I used a knife or gun on my partner”) acts of violence. The Cronbach’s alphas for lifetime and past year *prevalence scores* were .90 and .87 for men, and .85 and .89 for women in this study on self-report scales; and .92 and .90 for men, and .87 and .91 for women on partner-report scales. The reliability coefficients of *past-year frequency scores* for men and women were .60 and .76, and .75 and .85 for self-reported and partner-report scales respectively. Singapore prison considers a short-term sentence to be less than a year whereas any sentence longer than a year is considered a long-term sentence. There was no difference in reliability for inmates who had been in prison for a short-term sentence (less than a year) as compared to inmates that had been in prison for long-term sentence (more than a year). We recognized the low reliability of men’s self-reported Physical Assault *past-year frequency* scores. However, deleting any item from the scale did not noticeably improve reliability. Thus, the full scale was used bearing in mind its limitations.

Data collection

Research was conducted according to procedures approved by a university ethics board and the Singapore Prison Service. At the men’s prison, surveys were conducted in

groups of 15 while prison officers waited outside the rooms. At the women's prison, surveys were conducted in groups of 30. During testing, approximately three prison officers remained at the back of the room but had no interaction with the women throughout. Both men and women were informed that participation was confidential, voluntary, and had no implications on their sentences whatsoever.

Results

Participant characteristics

The demographic details of participants are summarized in Table 1. Significant gender differences on variables are indicated with an asterisk. As can be seen in Table 1, men and women were matched on most demographic measures. However, significant sex differences were found on some variables. First, women had on average been incarcerated longer and had received longer sentences than had men. Although this might suggest that women were incarcerated for more serious crimes, it was found that more women were incarcerated for drug offenses whereas more men were incarcerated for theft/robbery type offences. Particularly relevant to this study, men and women were equally involved in violent crimes. Closer analyses revealed, however, that men mostly aggressed against strangers, whereas women mostly aggressed against intimate partners or someone within their family. Only a small percentage of men aggressed against children, while no women reported violence against children.

[Insert Table 1 about here]

During analyses, data from 24 men and 21 women were removed due to excessive missing data and/or unusual responding, for instance answering all questions at the extremes or with the same value, or appearing to “fake good” on the CTS by not endorsing any items on the psychological aggression scales. Participants who had never been in a previous relationship were removed. No participants were excluded for reasons relating to English

proficiency. Final analyses used data from 75 men and 75 women. To assess for violations of assumptions for statistical analyses, normality was examined. According to Kline (2005), skewness values >3 and kurtosis values ≥ 10 are of concern. Analyses indicated that skewness and kurtosis values for variables in this study were all within these limits, except for men's self-reported physical assault (skewness = 3.08; kurtosis = 11.95). A square-root transformation was performed. As a result the distribution for men's physical assault was normalized. Subsequent analyses used both transformed and untransformed variables for men's physical assault. As there were no significant differences in results generated, findings from untransformed data are presented.

For both the control and CTS scale, although the responses formed an ordinal scale, the ordinal categories were converted into frequency midpoints to reflect the frequency of each behaviour. Behaviours that occurred once were recorded as 1; twice (recorded as 2); 3-5 times (recorded as 4); 6-10 times (recorded as 8); 11-20 times (recorded as 15) and more than 20 times (recorded as 25). The remaining two categories were treated as zero. This allowed for the measure of the relative frequency of each behaviour, and were combined to provide estimated frequency scores for each subscale.

Tables 2 and 3 present the means, standard deviations, and minimum and maximum scores for physical assault. These were based on past-year frequency scores. Tables 4 and 5 report the percentage of self- and partner- reported physical assault by men and women based on lifetime and past-year prevalence scores.

[Insert Table 2 about here]

[Insert Table 3 about here]

[Insert Table 4 about here]

[Insert Table 5 about here]

To examine the interaction between gender and physical violence severity, four 2 (gender: male, female) x 2 (violence severity: minor, severe) mixed analyses of variance

(ANOVAs) were run, with gender as a between-subjects factor and physical violence severity as a within-subjects factor. More complex analyses (e.g., a MANOVA) were not used as only dependent variable (violence severity) was examined. In order, the ANOVAs run were gender x self-reported violence severity (frequency scores), gender x partner-reported violence severity (frequency scores), gender x self-reported violence severity (past-year prevalence scores), and gender x partner-reported violence severity (past-year prevalence scores). To ensure that the prevalence and frequency variables of self- and partner-reported violence severity were measured in the same metric, the scores were converted into percentages prior to running the ANOVAs. These means, standard deviations, and maximum and minimum scores converted into percentages are presented in parentheses in Tables 2 and 3.

The first ANOVA indicated a significant main effect of self-reported violence severity (frequency scores), $F(1, 147) = 25.07, p < .001$, partial $\eta^2 = .15$. That is, averaged across gender, more frequent minor than severe physical violence perpetration was self-reported. There was also a significant main effect of gender, $F(1, 147) = 4.29, p = .04$, partial $\eta^2 = .03$. That is, averaged across violence severity, women reported perpetrating more frequent physical violence than did men. There was, however, no significant interaction between gender and violence severity, $F(1, 147) = .42, p = .52$, partial $\eta^2 = .003$.

The second ANOVA indicated a main effect of partner-reported violence severity (frequency scores), $F(1, 145) = 8.70, p = .004$, partial $\eta^2 = .06$. That is, averaged across gender, inmates reported that their partners perpetrated more frequent minor than severe physical violence. There was no main effect of gender, $F(1, 145) = 3.32, p = .07$, partial $\eta^2 = .02$. The interaction between gender and partner-reported violence severity was also not significant, $F(1, 145) = 1.22, p = .27$, partial $\eta^2 = .01$.

The third ANOVA indicated a main effect of self-reported violence severity (past-year prevalence scores), $F(1, 148) = 83.66, p < .001$, partial $\eta^2 = .36$. That is, averaged across gender, there was a higher prevalence of self-reported minor than severe physical violence. There was no significant main effect of gender, $F(1, 148) = 2.54, p = .11$, partial $\eta^2 = .02$. There was also no significant interaction between gender and violence severity (past-year prevalence rates), $F(1, 148) = .02, p = .88$, partial $\eta^2 = .00$.

The fourth ANOVA indicated a main effect of partner-reported violence severity (past-year prevalence rates), $F(1, 148) = 51.86, p < .001$, partial $\eta^2 = .26$. That is, averaged across gender, inmates reported that their partners perpetrated a higher prevalence of minor than of severe physical violence. There was also a significant main effect of gender, $F(1, 148) = 8.67, p = .004$, partial $\eta^2 = .06$. That is, averaged across severity, more women than men reported that their partners had perpetrated physical violence on them at least once in the past year. The interaction between gender and partner-reported violence severity was not significant, $F(1, 148) = .003, p = .95$, partial $\eta^2 = .00$.

In his research, Johnson (2006) identified two clusters of high and low control with a Ward method of cluster analyses. Although cluster analysis is limited in produce groupings specific only to the present data, a K-means cluster was utilized because there was existing knowledge about the number of clusters that characterize the variable. Hence, following Johnson's example, a K-means cluster analyses with two clusters was performed on standardized scores for the Control Scale. Results indicated that 82.7% (N=62) and 17.3% (N=13) of men, and 81.3% (N=61) and 18.7% (N=14) of women in the sample fell within low and high control clusters respectively. Among assaultive inmates, 27.7% (N=13) of men and 22.8% (N=13) of women fell into high control clusters. Refer to Figure 1 and Figure 2 for graphical representations of control clusters.

[Insert Figure 1 about here]

[Insert Figure 2 about here]

To classify respondents into respective IPV typologies using self- and partner-reports, respondents and their partners were categorized as violent or non-violent based on physical assault lifetime prevalence scores, and categorized as controlling or non-controlling based on whether they fell into the high or low control clusters respectively. In this study, five categories were differentiated. Johnson's (2006) three typologies of coercive controlling IPV-IT, MVC, and VR, were directly adapted. However, the SCV typology was separated into SCV Self-only (SCVS) that involved one-sided perpetration, and SCV-Mutual (SCVM) that involved reciprocal perpetration. Table 6 illustrates the categorization of IPV typologies. During analyses, seven cases with one partner who was non-violent but controlling could not be categorized and were omitted from the analyses.

[Insert Table 6 about here]

Figure 3 presents IPV typologies for men and women based on self-report of physical assault and control used. Figure 4 presents IPV typologies for male and female partners of inmates based on inmates' reports of physical assault and control perpetrated on them. Overall, the distribution pattern of IT, VR, SCVS, SCVM, and MVC perpetrated by men and women measured by both self and partner reports appeared strikingly similar. On both self- and partner-reports, a majority of women and men reported perpetrating SCVM. From self-reports, IT and VR appeared to be the least reported forms of IPV and from partner-reports, IT, VR, as well as SCVS appeared to be the least reported forms of IPV.

[Insert Figure 3 about here]

[Insert Figure 4 about here]

Discussion

This is the first study in Singapore to examine IPV on a sample of prisoners. Sampling 150 men and women, the first objective was to explore the prevalence (whether or not) and

frequency (how often) rates of IPV perpetrated in the past year of inmates' last relationship prior to incarceration (hereafter referred to as "past-year" prevalence). Although lifetime prevalence rates were analyzed, only past-year frequency rates are presented due to the likelihood of higher accuracy in recalling behaviors within a shorter time frame. The second objective was to determine and compare the types of IPV perpetrated by both sexes.

To begin, this study found that both sexes reported minor as well as severe physical violence perpetration and victimization. Nevertheless, both men and women reported more minor than severe physical IPV perpetration and victimization. Overall, more women (64.0%) than men (46.7%) reported ever perpetrating physical IPV in the past year, although this difference was not statistically significant. Women also reported perpetrating more frequent physical IPV than did men, and this difference was statistically significant. Generally, the pattern of more female than male self-reported IPV is consistent with that reported in another Singaporean undergraduate study by the IDVS (Straus, 2004) as well as with that reported in a large-scale literature review by Desmarais et al. (2012) on Western samples. Compared with data in the Desmarais et al. study, the prevalence rates in this sample exceeded the pooled perpetration rates of women (28.7%) and men (22.3%) across sample settings, as well as women (41.7%) and men (32.9%) from clinical samples. Due to the extremity of a prison sample, this is unsurprising. When inmates' reports of opposite sex partners were evaluated, however, results were in the reverse direction. Overall, significantly more male partners (63.0%) than female partners (41.3%) were reported to have perpetrated IPV in the past year. Moreover, although not statistically significant, women reported being physically assaulted by male partners more frequently than men reported being physically assaulted by female partners. Overall, it appeared that when self-reports were measured, women reported perpetrating more IPV than did men. However, when inmates' reports of their partners were measured, male partners were reported to perpetrate more IPV than were female partners.

Considering the conflicting patterns of results from self- and partner-reports, it is difficult to draw firm conclusions regarding prevalence rates between sexes. At a glance, women reported higher rates of both perpetration and victimization. An immediate interpretation could be that when comparing an extreme sample of prisoners, more women perpetrate (and hence inadvertently receive) higher rates of IPV than do men or perhaps that women in this sample experienced overall higher IPV in their relationships than men. From closer analyses of results, however, the higher reliability of women's reporting as compared to the poor reliability of men's reporting suggested that it was possible that women were more truthful in reporting IPV perpetration. No doubt, this reasoning has been offered by feminists to account for women's perpetration and has been challenged by empirical evidence showing the contrary. For instance, in a review by Sugarman and Hotaling (1996), low correlations between reporting of physical assault on the CTS2 and social desirability suggested that scores on the CTS2 reflected true differences in violence and not discrepancies in openness to reveal socially undesirable behavior. Yet, in the present study, only the reliability of men's self-reports on physical assault fell below the threshold of conventional reliability standards. Men's partner-reports as well as women's self- and partner-reports had acceptable reliability. These findings question the accuracy of men's willingness to expose their own as compared to their partners' perpetration. Consistent with this, whilst completing the questionnaires, it was noted that some men commented that severe questions on the CTS2 were more suitable for criminals in "maximum security" jails or "others" who batter women. No such comments were observed from women. First, comments suggested that some questions on severe violence (e.g., "I used a knife or gun on my partner") were difficult to relate to in a Singaporean context where access to guns is prohibited. Second, the distancing from being associated with "other" wife-batterers led to the suspicion that some men may have provided conservative estimates of their violence. Conclusions are nonetheless limited because

inmates' social desirability was not assessed and no questions on how inmates viewed IPV perpetration were included.

The first half of this study indicated that more females reported higher physical IPV perpetration as well as victimization rates than did men. No doubt, results immediately suggest that women in this extreme sample perpetrated (and hence possibly inadvertently received) higher rates of IPV than did men. However, questions were raised concerning the reliability of men's self-reports and results pertaining to men's perpetration need to be interpreted with caution. Even so, self-reported perpetration rates in this study appeared comparable to that reported in a robust literature review by Desmarais et al. (2012) of clinical and community samples in the West.

In the second half of the study, using Johnson's (2006) method of categorization, inmates' IPV were distinguished into five categories. Three IPV typologies involved coercive controlling violence—Intimate Terrorism (IT), Mutual Violent Control (MVC), and Violent Resistant (VR). Two IPV typologies involved non-coercive controlling violence—Situational Couple Violence Self-Only (SCVS) and Situational Couple Violence Mutual (SCVM). During analyses, it was noted that several cases involved violence perpetration by a partner who was non-violent but controlling. These cases could not be categorized and were omitted. Overall, the proportion of IPV typologies established from self- and partner-reports were strikingly similar. Thus, for simplicity, only self-reports of IPV are presented.

In this study, it was found that 74.4% (N=35), 17.0% (N=8), 6.4% (N=3), and 2.1% (N=1) of men and 72.1% (N=44), 14.8% (N=9), 6.6% (N=4), and 6.6% (N=4) of women perpetrated SCV, MVC, IT, and VR types of IPV respectively. Interestingly, results were similar to those reported in a North England prison study by Graham-Kevan and Archer (2003), where 80.8% (N=42), 9.6% (N=5), 3.8% (N=2), and 5.8% (N=3) of men; and 79.3% (N=42), 9.4% (N=5), 9.4% (N=5), and 1.9% (N=1) of women perpetrated SCV, MVC, IT, and VR respectively. On the whole, consistent with the first hypothesis, a comparable

proportion of men and women engaged in each type of IPV. At a glance, results seem to support a family violence perspective where both sexes engage in less severe non-controlling as well as more severe controlling violence at comparable rates. It should be noted however that although men and women in this sample matched on most demographic measures and were equally involved in violent crime, some differences existed. Namely, women had longer sentences and more drug related offences; and amongst inmates charged for violent offences, women primarily targeted their violence at family members whereas men targeted their violence more towards strangers. Based on these differences, it is therefore premature to draw conclusions regarding gender symmetry based on this sample.

Even so, results did not appear to support Johnson's (2006) conclusions—which support feminist ideologies—that women mainly perpetrated VR in retaliation to men's violence and that controlling violence was a male-only perpetrated phenomenon. With regard to VR, although a few more women than men reported perpetrating VR, meaningful comparisons could not be made because only one man reported VR perpetration. Nevertheless, VR was the least perpetrated form of IPV by women in this study. Instead, coercive controlling types of IPV exceeded VR perpetration. Albeit a small percentage overall, this study found that an approximately equal proportion of men and women perpetrated IT and MVC. Results were discrepant from Johnson's (2006) reports that in 94 out of 97 cases from women's shelters and courts, husbands perpetrated IT. Our results are also discrepant from those of a women's refuge study by Graham-Kevan and Archer (2003) that reported 87.8% of men compared to only 3.7% of women perpetrated IT. Notably, shelter samples do now allow for generalizations to be made to other populations. Hence, such discrepancies are to be expected given that shelter samples typically have an overrepresentation of women victims whereas the present sample reflects extreme samples of male as well as female criminals. Nevertheless, gender comparable patterns of controlling violence perpetration matched up with two large-scale Canadian community studies. One

found 35.7% of women and 33.3% of men (Brownridge, 2010), and the other found 26% of women and 19% of men (Larouche, 2005), perpetrated IT. In addition, in the prison sample in Graham-Kevan and Archer's (2003) study, it was found that slightly more women (9.5%) than men (4%) perpetrated IT and that an equal proportion (9.5%) of men and women perpetrated MVC. Thus it seems that when men and women are drawn from a similar sample, for example when they are both community or both extreme criminal samples, gender equivalent reports, or slightly more female than male reports, of controlling IPV tend to be found. However, when specific perpetrator/victim samples are measured, more men than women are found to perpetrate controlling IPV.

Indeed, the aforementioned results found that women approximately equaled men in perpetrating controlling types of violence. Although this immediately suggests that both sexes are equally driven to perpetrate by intentions to coercively control intimates, caution should be taken as it is unclear, particularly in situations of MVC, whether control was used purely to dominate or possibly used as counter-control tactics (Hamberger, 1997) in self-protection. Moreover, based on aforementioned differences between men and women in this sample, caution needs to be exercised when comparing results in the current study.

In line with the second hypothesis, SCV was found to be the most common type of IPV perpetrated by both sexes. A majority of men (55.3%, N=26) and women (62.3%, N=38) engaged in mutual SCV, and, to a lesser extent, 19.1% (N=9) of men and 9.8%, (N=6) of women engaged in one-sided SCV. While SCV has been typically portrayed as less risky violence (Johnson, 2006; Kelly & Johnson, 2008), there have been cases where SCV escalated into severe assaults (Johnson & Leone, 2005) and possible fatalities (Kelly & Johnson, 2008). Thus, given that SCV made up the majority of IPV in both the present and in Graham-Kevan and Archer's (2003) prison sample, it appears important, particularly in prison samples that have multiple co-occurring risks, that SCV be taken seriously and addressed equally for men and women.

Our findings have highlighted that a comparable proportion of men and women in this sample engaged in both non-controlling and controlling types of IPV. Results were similar to those found in a Western prison sample as well as in two large-scale Western community samples. Thus, it appears that gender equivalent findings tend to emerge when men and women from a demographically similar sample pool are studied. However, results did not match Western shelter samples, which was to be expected given the overrepresentation of victims/perpetrators in such samples. Nevertheless, because some differences between men and women in this sample were found in terms of sentence length and the reason for incarceration, it is premature to draw firm conclusions regarding gender symmetry from this data. Additionally, it has been highlighted that further contextualization of IPV perpetration is needed before definite conclusions are made. This is because in situations of mutual controlling violence it may not be accurate to assume partners are equally abusive and controlling as there could be a primary perpetrator within that dynamic. Nevertheless, although a criminal sample, the majority of violence was reported to be non-controlling in nature. Given the associated risk factors with a criminal sample, it is important that non-controlling violence too be taken seriously and afforded attention.

Limitations and directions for future research

The present study was limited in several ways and future research may benefit from taking these shortfalls into account. First, IPV involving a partner who is non-violent but controlling could not be categorized. Future studies could include an additional category to include all forms of IPV. Second, studies would benefit from assessing both partners in a dyad. Because the present sample was incarcerated, this was not possible and rates of self- and partner-reports within a dyad could not be compared. Thus differences between self- and partner-reports in this study had to be inferred. Third, cluster analysis was used to obtain high and low levels of control. Although useful in producing groupings, clustering is specific to the present data set's structure and may not accurately be compared with other studies. Notably,

participants found to exert low levels of control (that is the non-controlling group) were only so relative to the others in this sample. Due to this being a criminal sample, it is possible that what is considered non-controlling in this study may not be so when compared to a normative sample. As such, it is possible that when compared to the wider population, the percentage of men and women in each IPV typology may differ. That is, with more men and women being considered to be controlling. Moreover, dichotomous groupings do not allow for the possibility that many individuals experiencing SCV experience moderate levels of control (Frye, Manganello, Campbell, Walton-Moss, & Wilt, 2007). Thus without knowing the degree of control within each control group, meaningful information is lost. With regard to determining violence use, however, dichotomous categorizations did prove useful because any hesitation to self-disclose frequency of violence did not seem to impact on results. Evidently, although poor reliability was found for the frequency of men's self-reported perpetration, no problems with reliability were found for men's self-reported prevalence rates of perpetration. Therefore, while retaining Johnson's (2006) categorization methods, it may be useful to additionally analyze control and violence on a scale of severity and frequency. Particularly, such information would have been useful in this study to decipher varying levels of violence severity among the approximately 75% of SCV perpetrators. Fourth, due to the possibility that low rates of severe assaults reported (especially by male inmates) may have been due to inmates' difficulty relating to questions, it may be useful for questions on IPV perpetration to be tailored to a specific sample by using common forms of violence found in those samples. Fifth, this study used only behavioral measures to ascertain perpetration rates for violence and control. In order to better understand the dynamics of IPV, future studies should investigate the motivations behind perpetration and respondents' perceptions of IPV. This would not only help to contextualize IPV but also inform how perceptions of IPV influence one's responses to questions on IPV perpetration, as it seemed to have done in this study. In line with this, future studies may include a measure of social desirability to ascertain

accurate rates of responding, particularly in a society where IPV remains taboo. Sixth, this study compared the sexes of participants. However, no information on the gendered attitudes of inmates was gathered. Singapore is a multi-cultural society where people hold onto varying degrees of traditionally patriarchal values. Given that patriarchal issues have been identified as key to conceptualizing IPV, future research may benefit from taking into account respondents' cultural and gendered identities. Seventh, although this study aimed to compare rates and types of IPV perpetration between men and women and participants were demographically compatible in most areas, several significant differences between men and women were found suggesting that they differed in the level of seriousness in the crimes they committed and because of inherent differences in the manner in which men and women are sentenced, direct comparisons may have been compromised. Thus, it is important that premature conclusions regarding are not drawn from this data. Finally, results are limited to the present forensic sample and are not representative of the wider population. Thus results cannot be extrapolated to the broader Singapore community. Future studies may benefit from enlisting a more general and larger sample to allow for more meaningful generalizations. Particularly, it may be useful that a prospective power analyses be conducted to determine the minimum sample needed as this was not done in the present study.

Conclusions

IPV research in Singapore is embryonic and this study is the first to provide insight into the rates and types of IPV in a prison sample. At this stage, whether men or women have higher rates of perpetration remains inconclusive due to the possibilities of inaccurate responding by men. Overall, the proportion of men and women found to perpetrate controlling and non-controlling types of IPV were roughly equivalent and conformed to results found in Western prison and community samples. While it is tempting to take results at face value and conclude gender equivalent perpetration, further contextualization of IPV is needed to decipher motives and the use of perpetration particularly when mutual coercive

control is involved. Moreover, because of differences found in terms of sentence length and reasons of incarceration between men and women, direct comparisons of IPV may be premature. Regardless, results underscore the need to expand the traditional focus on one-sided male perpetrated violence to include investigations of one-sided female perpetrated violence as well as mutually perpetrated IPV. This could help demystify violence by both men and women. In Singapore, this is especially important because patriarchy may render help seeking even more challenging for male victims and may jeopardize women's protection if their motives for perpetration are not accurately determined. Furthermore, to include investigations of the various forms of IPV as this study has done, findings could help improve recognition and responses to each type of violence accordingly. This study indicates that SCV was the most pervasive type of IPV perpetrated by inmates. Although SCV may be overlooked due to its reputation of being less severe, it too has the potential to escalate and cause serious harm. Coupled with the myriad of risk factors present in a prison population, further investigation of the dynamics of SCV is warranted. Ultimately, such investigations can help channel appropriate services and responses to perpetrators and victims of SCV. In sum, although results are limited to the present sample, this study nonetheless provides initial estimates of IPV within a Singaporean prison sample and sets the stage for enhanced future research.

References

- Archer, J. (2000). Sex differences in aggression between heterosexual partners: A meta-analytic review. *Psychological Bulletin*, 126(5), 651-680. doi: 10.1037//0033-2909.126.5.651
- Brownridge, D. A. (2010). Does the situational couple violence- intimate terrorism typology explain cohabitators' high risk of intimate partner violence? *Journal of Interpersonal Violence*, 25, 1264-1283. doi: 10.1177/0886260509340544
- Centers for Disease Control and Prevention. (2013). *Intimate partner violence: Definitions*. Retrieved from <http://www.cdc.gov/violenceprevention/intimatepartnerviolence/definitions.html>
- Cheong, C. W., & Bong, B. (2010). *International violence against women survey: The Singapore Report*. Retrieved from <http://www.ncss.gov.sg/VWOcorner/abstracts.asp>.
- Desmarais, S. L., Reeves, K. A., Nicholls, T. L., Telford, R. P., & Fiebert, M. S. (2012). Prevalence of physical violence in intimate relationships: Part 2. Rates of male and female perpetration. . *Partner Abuse*, 3(2), 170-198.
- Dobash, R. E., & Dobash, R. P. (1977). Wives: The appropriate victims of marital violence. *Victimology*, 2, 426-442.
- Dobash, R. P., Dobash, R. E., Wilson, M., & Daly, M. (1992). The myth of sexual symmetry in marital violence. *Social Problems*, 39, 71-91.
- Dozier, M., Stovall-McClough, K. C., & Albus, K. E. (2008). Attachment and psychopathology in adulthood. In J. Cassidy & P.R. Shaver (Ed), *Handbook of attachment: Theory, research, and clinical applications* (2nd ed., pp. 718-744). New York, NY: Guilford Press.
- Fiebert, M. M. (2010). References examining assaults by women on their spouses or male partner: An annotated bibliography. *Sexuality and Culture*, 14, 49-91.

- Frankland. (2011). *Domestic violence in same-sex relationships*. (Unpublished doctoral dissertation), Macquarie University, Sydney, Australia.
- Frye, V., Manganello, J., Campbell, J. C., Walton-Moss, B., & Wilt, S. (2007). The distribution of and factors associated with intimate terrorism and situational couple violence among a population-based sample of urban women in the United States. *Journal of Interpersonal Violence, 21*, 1286–1313.
- Graham-Kevan, N., & Archer, J. (2003). Intimate terrorism and common couple violence: A test of Johnson's predictions in four British samples. *Journal of Interpersonal Violence, 18*, 1247-1270. doi: 10.1177/0886260503256656
- Hamberger, L. K. (1997). Female offenders in domestic violence. *Journal of Aggression, Maltreatment & Trauma, 1*(1), 117-129. doi: 10.1300/J146v01n01_07
- Johnson, M. P. (1995). Patriarchal terrorism and common couple violence: Two forms of violence against women. *Journal of Marriage and the Family, 57*, 283-294.
- Johnson, M. P. (2006). Conflict and control: Gender symmetry and asymmetry in domestic violence. *Violence Against Women, 12*, 1003-1018. doi: 10.1177/1077801206293328
- Johnson, M. P., & Ferraro, K. J. (2000). Research on domestic violence in the 1990s: Making distinctions. *Journal of Marriage and the Family, 62*, 948-963.
- Johnson, M. P., & Leone, J. M. (2005). The differential effects of intimate terrorism and situational couple violence: Findings from the National Violence Against Women Survey. *Journal of Family Issues, 26*(3), 322-349.
- Jongwilaiwan, R., & Thompson, E. C. (2011). Thai wives in Singapore and transnational patriarchy. *Gender, Place and Culture: A Journal of Feminist Geography, 1-19*. doi: 10.1080/0966369x.2011.624588
- Kelly, J. B., & Johnson, M. P. (2008). Differentiation among types of intimate partner violence: Research update and implications for interventions. *Family Court Review, 46*, 476-499.

- Kimmel, M., S. (2002). "Gender symmetry" in domestic violence. A substantive and methodological research review. *Violence Against Women*, 8, 1332-1363. doi: 10.1177/107780102237407
- Kline, R. B. (2005). *Principles and practice of structural equation modeling*. New York, NY: The Guilford Press.
- Laroche, D. (2005). *Aspects of the context and consequences of domestic violence - Situational couple violence and intimate terrorism in Canada in 1999*. Quebec: Government of Quebec: Institut de la statistique du Québec.
- Lenton, R. L. (1995). Power versus feminist theories of wife abuse. *Canadian Journal of Criminology*, 37, 305-330.
- Leong, F. T. L., & Austin, J. T. (2006). *The psychology research handbook* (2nd ed.). Thousand Oaks, CA: Sage.
- Levinson, A., & Fonagy, P. (2004). Offending and attachment: The relationship between interpersonal awareness and offending in a prison population with psychiatric disorder. *Canadian Journal of Psychoanalysis*, 12, 225-251.
- Ross, J. M. (2011). Personality and situational correlates of self-reported reasons for intimate partner violence among women versus men referred for batterers' intervention. *Behavioral Sciences & the Law*, 29(5), 711-727. doi: 10.1002/bsl.1004
- Smith, M. D. (1987). The incidence and prevalence of woman abuse in Toronto. *Violence and Victims*, 2, 173-187.
- Straus, M. A. (2004). Prevalence of violence against dating partners by male and female university students worldwide. *Violence Against Women*, 10(7), 790-811. doi: 10.1177/1077801204265552
- Straus, M. A. (2004a). Cross-cultural reliability and validity of the Revised Conflict Tactics Scales: A study of university student dating couples in 17 nations. *Cross-cultural Research*, 38(4), 407-432. doi: 10.1177/1069397104269543

- Straus, M. A. (2008). Dominance and symmetry in partner violence by male and female university students in 32 nations. *Children and Youth Services Review, 30*, 252-275. doi: 10.1016/j.chilyouth.2007.10.004
- Straus, M. A. (2011). Gender symmetry and mutuality in perpetration of clinical-level partner violence: Empirical evidence and implications for prevention and treatment. *Aggression and Violent Behavior, 16*, 279-288. doi: 10.1016/j.avb.2011.04.010
- Straus, M. A., & Gozjolko, K. L. (in press). "Intimate terrorism" and injury of dating partners by male and female university students. *Journal of Family Violence*.
- Straus, M. A., & Mickey, E. L. (2012). Reliability, validity, and prevalence of partner violence measured by the conflict tactics scales in male-dominant nations. *Aggression and Violent Behavior, 17*, 463-474. doi: 10.1016/j.avb.2012.06.004
- Straus, M. A., Hamby, S. L., Boney-McCoy, S., & Sugarman, D. B. (1996). The Revised Conflict Tactics Scales (CTS2): Development and preliminary psychometric data. *Journal of Family Issues 17*, 283–316.
- Sugarman, D. B., & Hotaling, G. T. (1996). Intimate violence and social desirability: A meta-analytic review. *Journal of Interpersonal Violence, 12*, 275-290.
- Walsh, Z., Swogger, M. T., O'Connor, B. P., Schonbrun, Y. C., Shea, T. M., & Stuart, G. L. (2010). Subtypes of partner violence perpetrators among male and female psychiatric patients. *Journal of Abnormal Psychology, 119*, 563–574. doi: 10.1037/a0019858
- Warner, T. D. (2010). Violent acts and injurious consequences: An examination of competing hypotheses about intimate partner violence using agency-based data. *Journal of Family Violence, 25*, 183–193.

Tables and Figures

Table 1

Demographic Characteristics of Participants

Characteristic	Men	Women
Ethnicity		
Malay	36.1%, N=26	49.3%, N= 37
Chinese	41.7%, N=30	36.0%, N=27
Indian	12.5%, N= 9	5.3%, N=4
Others	9.7%, N=7	9.3%, N=7
Sentencing		
***Average length of incarceration (years)	1.14	2.08
**Average full sentence (years)	4.08	5.88
Relationship Status		
*Currently in a relationship	50.0%, N=37	67.6%, N=50
Average relationship length (years)	6.32	7.18
Average number of previous relationships	2.41	3.04
Average length of previous relationships (years)	4.06	4.06
**Offences		
Drug related	52.9%, N=36	81.3%, N=52
Theft/robbery	27.9%, N=19	6.3%, N=4
Other offences (violent and non-violent)	19.1%, N=13	12.5%, N=8
Involvement in violent crime		
Involved in violent crime	77.3%, N=34	65.4%, N=17
**Violent crime toward		
Stranger	71.4%, N=25	31.3%, N=5
Known person/family member	17.1%, N=6	37.5%, N=6
Intimate partner	5.7%, N=2	31.3%, N=5
Child	5.7%, N=2	0%
Personal protection order (PPO)		
Percentage yes	9.3%, N=7	4.2%, N=3
Duration of PPO (months)	14	6

Note: The total N varies for each characteristic due to missing data.

Where there is a significant difference in males and females on a variable, this is indicated by

** $p < .05$, ** $p < .01$, *** $p < .001$*

Table 2

Mean(M), Standard Deviation(SD), and Range of Scores for Men's Self-Reported and Reports About Female Partners' Physical IPV Perpetration

	N	M(%M)	SD(%SD)	Range of possible scores	
				Minimum (%value)	Maximum (% value)
Men's self-report					
Total	75	13.04(4.35)	27.74(9.25)	0(0)	164(54.67)
Minor	74	9.19(7.35)	17.77(14.21)	0(0)	67(53.60)
Severe	75	3.97(2.30)	14.73(8.47)	0(0)	109(62.29)
Men's reports about female partners					
Total	75	13.52(4.51)	31.14(10.38)	0(0)	156(52.00)
Minor	73	8.48(6.78)	16.65(13.32)	0(0)	65(52.00)
Severe	75	5.27(3.09)	17.77(10.28)	0(0)	110(62.86)

Note: Values in brackets represent variables changed into percentages for ANOVAs.

Table 3

Mean(M), Standard Deviation(SD), and Range of Scores for Women's Self-Reported and Reports About Male Partners' Physical IPV Perpetration

	N	M(% value)	SD(% value)	Range of possible scores	
				Minimum (%value)	Maximum (% value)
Women's self-report					
Total	75	25.96(8.65)	43.58(14.53)	0(0)	177(59.00)
Minor	75	15.59(12.47)	26.43(21.15)	0(0)	102(81.60)
Severe	75	10.37(5.93)	20.75(11.86)	0(0)	79(45.14)
Women's reports about male partners					
Total	75	25.96(8.65)	45.18(15.06)	0(0)	242(80.67)
Minor	74	12.19(9.75)	21.53(17.22)	0(0)	108(86.40)
Severe	75	13.93(8.07)	26.88(15.43)	0(0)	134(76.57)

Note: Values in brackets represent variables changed into percentages for ANOVAs.

Table 4.

Men's Self-reported and Reports about Female Partners' Lifetime and Past year Rates of Physical (Phy) IPV Perpetration

	Men's self-report				Men's reports of female partners			
	Lifetime		Past year		Lifetime		Past Year	
	%	N	%	N	%	N	%	N
Phy Total	65.3	49	46.7	35	54.7	41	41.3	31
Phy Minor	64.0	48	47.3	35	53.3	40	39.7	29
Phy Severe	28.0	21	18.7	14	22.7	17	16.0	12
Phy Total	34.7	26	29.3	22	30.7	23	26.7	20

Table 5.

Women's Self-reported and Reports about Male Partners' Lifetime and Past year Rates of Physical (Phy) IPV Perpetration

	Women's self-report				Women's reports of male partners			
	Lifetime		Past year		Lifetime		Past Year	
	%	N	%	N	%	N	%	N
Phy Total	81.3	61	64.0	48	81.3	61	64.0	48
Phy Minor	78.7	59	61.3	46	76.0	57	59.5	44
Phy Severe	52.0	39	36.0	27	57.3	43	45.3	34

Table 6.

Categorization of IPV Typologies

		IPV Typology of inmate's partner (Inmate's report about partner)		
		Violent and controlling	Violent and non-controlling	Non-violent
IPV typology of inmate (self- report)	Violent and controlling	Mutual Violent Control	Violent Resistant by inmate's partner	Intimate Terrorism by inmate
	Violent and non-controlling	Violent Resistant by inmate	Situational Couple Violence (Mutual)	Situational Couple Violence (one-sided by inmate)
	Non-violent	Intimate Terrorism by inmate's partner	Situational Couple Violence (one-sided by inmate's partner)	-

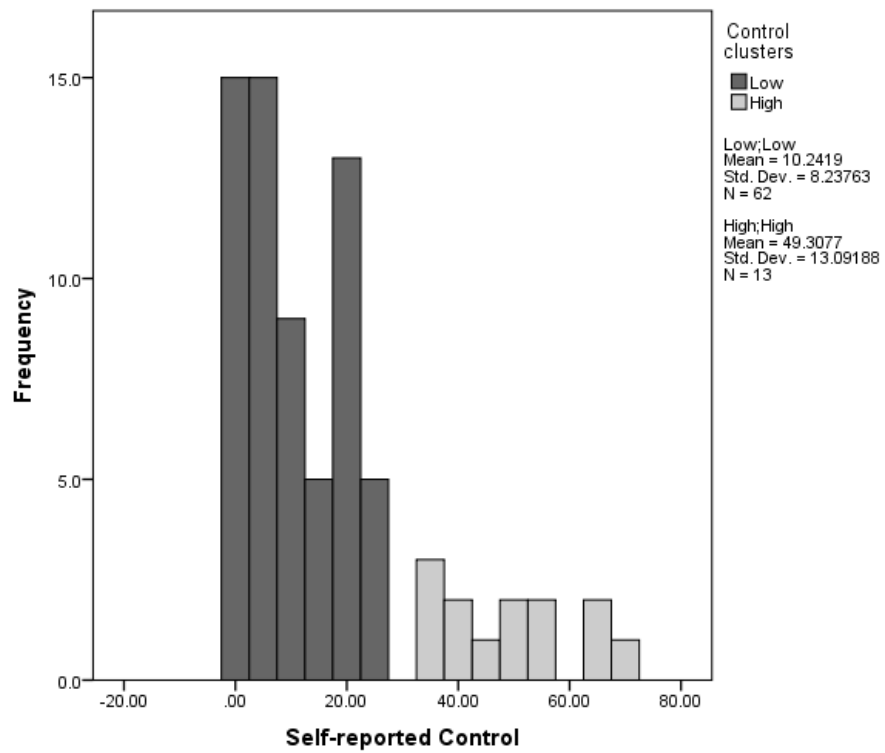


Figure 1. Men: Clusters for control variable.

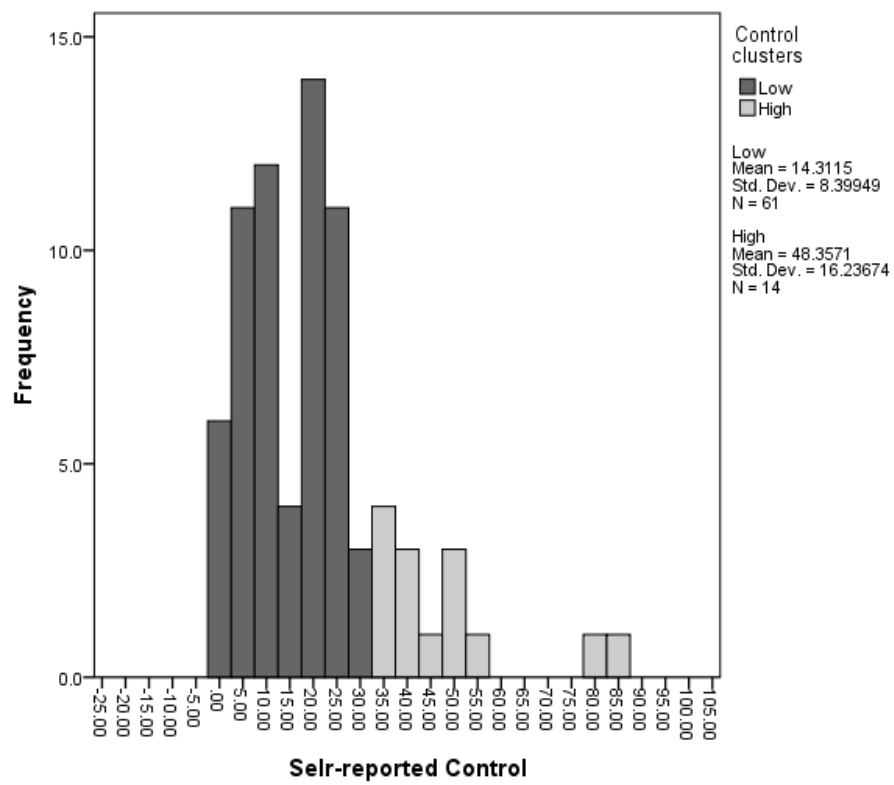


Figure 2. Women: Clusters for control variable.

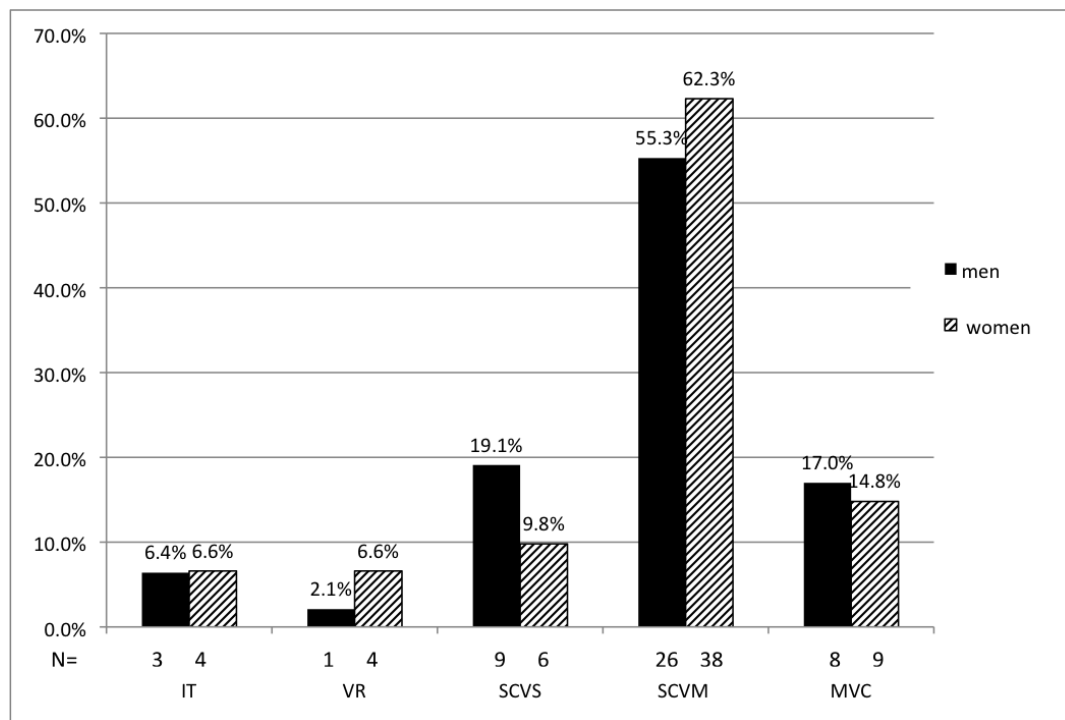


Figure 3. IPV typologies based on self-reports of perpetration.

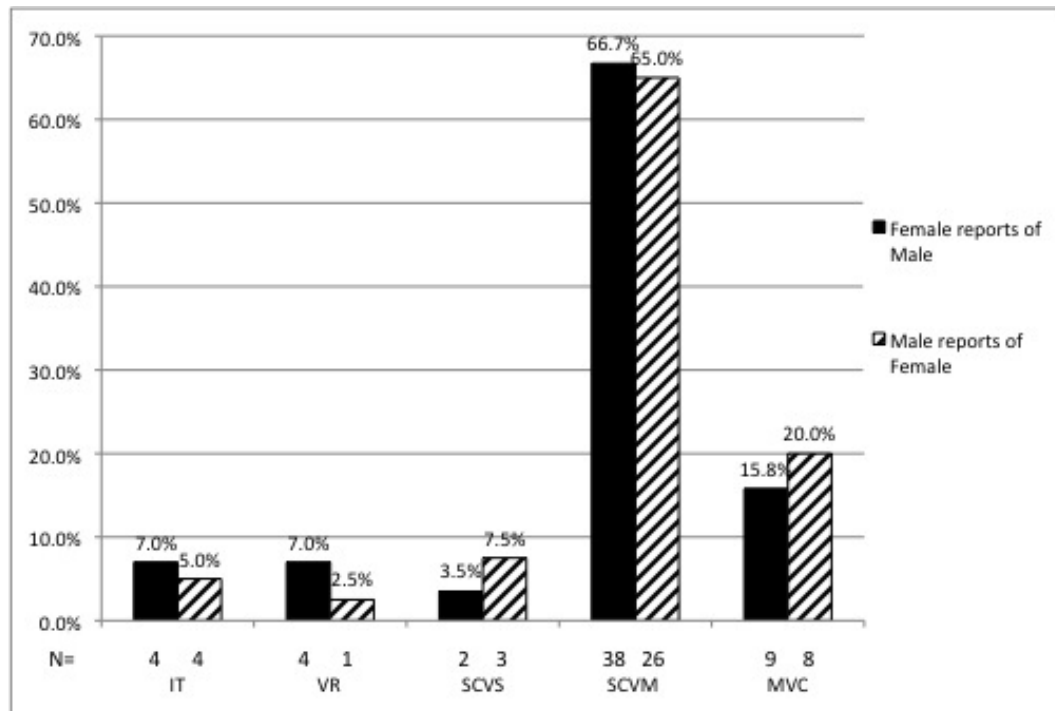


Figure 4. IPV typologies based on reports of partner's perpetration.

CHAPTER 3

Exploring a rejection-abuse cycle model of intimate partner violence in men
from a Singapore prison

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Abstract

Using an attachment framework, this study examined IPV in 99 male Singapore prisoners. First, the relationship between a range of variables including shame, alexithymia and insecure (anxious and avoidant) attachments, to physical and psychological intimate partner violence (IPV) perpetration was examined. Second, the variables of anxious attachment, shame, alexithymia and IPV perpetration were linked together to test how well a rejection-abuse cycle (RAC) model of IPV fit with men's IPV perpetration. Results indicated that physical IPV was only associated with avoidant attachment but not with any of the variables within the RAC model. Conversely, psychological IPV was not related to avoidant attachment but was associated with all the variables within the RAC model. As such, the RAC model could only be tested on men's psychological but not physical IPV perpetration. Using structural equation modeling analyses, the RAC model was not found to fit with men's psychological IPV perpetration per se; however post-hoc analyses using a control variable as an alternative measure of psychological IPV found partial support for a linear rejection-abuse path of IPV perpetration. Notably, due to the poor reliability of men's self-reported physical IPV perpetration, results pertaining to men's physical assault need cautious interpretation. Implications of results and its limitations are discussed in light of recommendations for treatment and future research.

Keywords: Intimate partner violence, attachment, rejection, Singapore, men

Exploring a rejection-abuse cycle model of intimate partner violence in men from a Singapore prison

The incongruence of hurting a loved one has led to significant amounts of research designed to understand intimate partner violence (IPV). IPV is defined as “physical, sexual or psychological harm by a current or former partner or spouse” that can occur between “heterosexual or same-sex couples and does not require sexual intimacy” (Centers for Disease Control and Prevention: CDC, 2013). IPV may differ in frequency and severity and occurs on a “continuum, ranging from one hit that may or may not impact the victim to chronic, severe battering (CDC, 2013). Over time, various ideologies have emerged to explain the causes of IPV. These include the influence of patriarchy (Dobash & Dobash, 1977); exposure to violence in the family growing up (Bowen 1978; Mihalic & Elliott, 1997; Straus, 1976, 1977); childhood trauma; and impaired attachments (Dutton, 1995; Holtzworth-Munroe & Stuart, 1994) amongst others. No doubt, each ideology furthers understanding and it is improbable that any one variable comprehensively explains IPV. Yet, of existing theories, attachment theory has been underscored as having promise to shed light on IPV (Sonkin & Dutton, 2003; Fonagy, 1999). Thus, recognizing the need for multiple concepts to explain IPV and the potential of attachment theory, this study examined the relationship between a range of variables (including shame, alexithymia, and insecure attachments) and IPV. In addition, this study tested to see if some these variables linked together to form a circular path of rejection-abuse that could explain forms of IPV perpetration that stem from anxious attachments. Particularly, this paper explored a rejection-abuse cycle (RAC) model of IPV developed by Brown, James and Taylor (2010), from which the variables chosen for this study were drawn from.

Brown and colleagues (2010) proposed a RAC model where: (1) An anxiously attached man experiences an intimate’s behavior as rejecting that triggers reminders of past attachment trauma; (2) The man’s sense of self is threatened, evoking feelings of shame; (3)

The man uses alexithymia to defend against this threat; (4) Alexithymia not only fails to alleviate emotional pain during intense conflict but also has the effect of desensitizing the man from his feelings. Thereby paving the way and resulting in IPV perpetration; (5) IPV itself exacerbates rejection from a partner thereby maintaining the RAC.

Anxiously attached adults fear and are sensitive to threats of rejection. When threatened, many regulate anxiety by demanding closeness and some become aggressive to achieve proximity (Babcock, Jacobson, Gottman, & Yerington, 2000; Bartholomew & Allison, 2006). Indeed, research has consistently reported links between attachment anxiety and men's IPV perpetration (Babcock et al., 2000; Dutton, Saunders, Starzomski, & Bartholomes, 1994; Henderson, Bartholomew, Trinke, & Kwong, 2005; Holtzworth-Munroe, Stuart & Hutchinson, 1997). Brown et al. (2010) proposed that in a subset of anxiously attached men, when real or perceived rejection is experienced, this triggers past rejection trauma followed by shameful feelings of being unworthy. For these men, shame is experienced as a depletion of the 'self' and they do anything that helps defend against this threat. Supporting this theory, research has reported strong associations between shame and IPV perpetration (Dutton, van Ginkel, & Starzomski, 1995; Harmon, 2002; Harper, 2005). Brown et al. (2010) purport that one way anxious men survive is by cutting-off feelings of shame via alexithymia. When utilizing alexithymia, individuals may feel emotional pain, however are unable to identify, differentiate or describe their emotions (Nemiah, Freyberger & Sifeneos, 1976). Alexithymia has been linked to dissociation (Evren, Sar, Evren, Semiz, Dalbudak, & Cakmak, 2008), a strategy associated with managing trauma-related memories and painful emotions (Tutkun, Savas, Zoroglu, Esgi, Herken, & Tiryaki, 2004; Grabe, Rainermann, Spitzer, Gansicke, & Freyberger, 2000). Both dissociation and alexithymia involve the denial and hence reduction of the subjective experience of painful emotions. Thus, theoretically alexithymia could reduce the impulses toward IPV perpetration and is probably the intent of perpetrators. Denial however only temporarily blocks emotional pain; and

research by Nemiah (1976) suggests that during highly stressful situations, individuals who use alexithymia experience intensified physiological reactions. Thus, the numbing of painful feelings may on the contrary exacerbate aggression because men are not conscious of any physiological or psychological warning signals of emotional built up prior to what seems like a sudden emotional explosion (Brown, 2012). Further, because alexithymia minimizes feelings, it desensitizes a man to his feelings and arguably paves the way for abuse perpetration. For these reasons, during heightened inter-partner conflicts, the sudden surge of pent-up feelings of shame is so overwhelming that all attempts to eliminate them via alexithymia are unsuccessful. In that instance, diminishing the source of shame becomes essential for psychological survival (Brown et al., 2010). Through attacking a partner, the man regains a sense of control that helps repair his damaged sense of self (Nathanson, 1992; Brown et al., 2010). Aggression therefore serves to “control” distress by “controlling” the source of shame and protects the attacker from further condemnation (Tangney, Wagner, Fletcher & Gramzow, 1992). While research on IPV and alexithymia is limited, one study by Yelsma’s (1996) reported that IPV perpetrators experienced significantly higher levels of alexithymia than functional spouses. No doubt seemingly counteractive, rage serves as a desperate attempt to manage feelings of rejection and regain contact (Bowlby, 1988). Consequentially, a partner may remain temporarily, possibly out of fear. However instead of reducing abandonment as the raging adult hopes, aggression likely encourages further rejection and/or eventual abandonment. Thereby, the RAC of IPV is maintained.

In their original paper, Brown et al., (2010) found support for the RAC model pertaining to psychological abuse on a pilot study of 66 men attending a community IPV treatment program in Australia. Specifically, Brown et al.’s (2010) reported that *rejection* (measured via anxious attachment and hostile childhood punishment) led to a *threat to self* (measured via shame and a sense of self), that led to *defense against threat* (measured via alexithymia) that led to *psychological abuse*, that ultimately led back to *rejection*. Notably,

Brown et al. (2010) could not validate their model on physical IPV because the level of physical assault in their sample was reportedly too low to be meaningfully tested. At this stage of research, supporting evidence of the RAC model is preliminary and further testing of the model is necessary. Therefore, in addition to the stated aims, this study also set out to test how well the RAC model applied to a different sample of IPV perpetrators. For reasons subsequently discussed, this study chose to use a Singaporean forensic sample.

First, a Singaporean sample offers a culturally diverse mix of Chinese, Malay, Indian and other ethnicities (Department of Statistics Singapore, 2010) that differs from Brown et al.'s (2010) culturally Western sample. Further, patriarchal family values remain more pronounced in Singapore's Asian society than they do in more gender-equivalent Western nations. Thus, this allows the relevance of the RAC model on a more patriarchal and culturally varied sample to be tested. Indeed, the fundamental processes underlying attachment are believed to be unanimous across cultures (Cassidy & Shaver, 1999; van Ijzendoorn & Sagi, 1999); suggesting that the RAC model too will apply across cultures. Second, a criminal sample was chosen to increase the likelihood of capturing more severe physical violence upon which to test the RAC model. Finally, early dysfunctions in attachment relationships are believed to be the foundation of borderline personality development (Dozier, Stovall-McClough, Albus, Cassidy, & Shaver, 2008) and widespread research has reported associations between borderline personalities and IPV perpetration in men (Ross & Babcock, 2009; Ehrensaft, Cohen, & Johnson, & Chen 2006; Holtzworth-Munroe & Stuart, 1994; Tweed & Dutton, 1998). Because the severity of IPV is linked to level of pathology (Edwards, Holden, Felitti, & Anda, 2003; Lawson, Weber, Beckmer, Robinson, Marsh, & Cool, 2003), borderline personalities are thought to highly prevail amongst incarcerated IPV perpetrators (Mauricio, Tein & Lopez, 2007). Hence prisoners were chosen to increase the relevance of testing a pathway of abuse stemming from impaired attachments.

Although largely based on Brown et al. (2010), this study expanded on their research by employing more widely used psychometric tests. Instead of using the Abusive Behaviour Inventory (ABI) (Shephard & Campbell, 1992) and the Spouse-Specific Dependency scale (Rathus & O’Leary, 1997), this study used the Revised Conflict Tactics Scale (CTS2) (Straus, Hamby, Boney-McCoy, Sugarman, 1996) and the Experiences in Close Relationships (ECR; Brennan, Clark, & Shaver, 1998) scale to measure IPV perpetration and attachment respectively. The CTS2 and the ECR are both more extensively used scales, that allow for more effective cross-study comparisons. Furthermore, Johnson (2006), one of the most cited researchers in the IPV field asserted that conclusions could not be drawn from research that failed to differentiate between the types of IPV perpetrated. Therefore, drawing upon Johnson’s (2006) method of distinguishing IPV types, a control scale was included to distinguish between controlling from non-controlling physical IPV.

The first part of the study explored the relationship between variables within the RAC model; including shame, alexithymia, and anxious attachment, and IPV perpetration. In addition, avoidant attachment was included to expand the exploration of the association between insecure types of attachment to IPV perpetration.

Based on results from Brown et al.’s (2010) study and other aforementioned research findings, it was hypothesized that shame, alexithymia, and anxious attachment would be positively correlated to physical and psychological IPV perpetration. On the other hand, research linking avoidantly attached individuals - that is, those who tend to retreat when feeling threatened in order to avoid feelings and regain control (Mikulincer, Florian, Cowen & Cowen, 2002) - to IPV perpetration is less consistent. Indeed, some (Babcock et al., 2000; Holtzworth-Monroe, Meehan, Herron, Rehman, & Stuart, 2000) but not other researchers (Dutton et al., 1994; Holtzworth-Munroe et al., 1997; Orcutt, Garcia, & Pickett, 2005) have reported significant associations. Thus, the relationship between avoidant attachment and IPV in this study was exploratory.

The second part of this study tested the applicability of the RAC model (Brown et al., 2010) to the present sample. It was hypothesized that *rejection* (measured via anxious attachment) would lead to a *threat to self* (measured via shame); that would lead to *defence against threat* (measured via alexithymia); that would lead to *abuse* (measured by physical and psychological IPV). Finally *abuse* would lead back to *rejection* and maintain the RAC. This study tested the model on psychological and physical IPV. The model is diagrammatic presented in Figure 1 where each variable influences the next variable and so forth till the path reaches the first variable again.

Last, Brown et al. (2010) suggested that their model was appropriate for some but not all perpetrators and this research aimed to explore whether men who were more controlling were more likely to fit the model.

[Insert Figure 1 about here]

Methods

Participants

This study randomly surveyed 99 men (21 years and above) from the Singapore Prison Service. Only inmates incarcerated for general offences were included. Inmates charged for murder or sex offences were excluded. Participants had a minimum secondary school education to ensure sufficient English proficiency to comprehend questionnaires. The demographic details of participants are summarized in Table 1.

[Insert Table 1 about here]

Measures

Demographic information including men's ethnicity, sentence length, relationship status, and offence type were collected together with the following questionnaires.

Experiences in Close Relationships (ECR; Brennan et al., 1998): This is a 36-item scale with 18 items measuring avoidant attachment (e.g., "I try to avoid getting too close to my partner" or "I prefer not to show a partner how I feel deep down") and 18 items measuring anxious attachment (e.g., "I worry about being abandoned" or "sometimes I feel that I force

my partners to show more feeling, more commitment”) in relation to adult intimate relationships. Each item is rated on a seven-point scale from 1 (*Disagree strongly*) to 7 (*Agree strongly*). Brennan, et al., (1998) reported the reliability coefficients for 1,086 undergraduates to be .94 for avoidant and .91 for anxious attachment. In this study the reliability coefficients for avoidant and anxious attachment were .81 and .86 respectively.

Feelings about self scale (McIlwain & Warburton, 2005): This is a 20-item scale measuring participant attributes relating to self-esteem and shame. Example of items include “It’s only a matter of time before people discover I’m a fake” and “Sometimes I just want to hide”. On a six-point scale, each item is rated from 1 (*completely untrue of me*) to 6 (*describes me perfectly*). McIlwain and Warburton (2005) reported the reliability coefficient for 1,347 undergraduates to range from .94 to .96. In this study, reliability was .80.

Toronto alexithymia scale (TAS-20) (Bagby, Parker & Taylor, 1994). This is a 20-item scale measuring the inability to recognize, discriminate or describe feelings. The TAS-20 provides an overall measure of alexithymia by combining three components of alexithymia - difficulty identifying feelings (e.g., “I have feelings that I can’t quite identify”); difficulty describing feelings (e.g., “It is difficult for me to find the right words for my feelings”); and externally oriented thinking (e.g., “I prefer talking to people about their daily activities rather than their feelings”). Responses are rated on a five-point scale ranging from 1 (*Strongly disagree*) to 5 (*Strongly agree*). Bagby et al. (1994) reported the reliability coefficient for 965 undergraduates to be .86 on overall alexithymia. In this study, reliability was .80.

Revised Conflict Tactics Scale (CTS2) (Straus et al., 1996). The CTS2 is a scale measuring 39 IPV behaviors that intimate partners engage in. For each of the 39 behavior items, respondents answer two questions regarding the behavior’s frequency: the first concerning their own perpetration (self-report) and the second concerning their partner’s perpetration (partner-report). Each question is rated on a scale from 0 (*Never*) to 6 (*More than 20 times*) about the frequency at which IPV was perpetrated in the past 12 months, or

respondents could endorse 7(*Not in the last year but before*). Straus and colleagues (1996) reported subscale internal consistency reliabilities to vary from .79 to .95.

In this study, only self-report scales were used along with two types of scorings: “*prevalence*” (yes or no) scores and “*frequency*” (how often) scores. *Lifetime prevalence* scores measured if respondents had ever perpetrated IPV in their lifetime. These scores were used in combination with *control* scores to determine IPV types. *Past-year frequency scores* measured how many times respondents perpetrated IPV in the past 12 months ‘of their last relationship prior to incarceration’. These scores were used in correlation and model fit analyses. The *Physical Assault and Psychological Aggression* subscales from the CTS2 used in this study and are described below:

The *Physical Assault* scale is a 12-item scale measuring the frequency at which respondents engaged in a range of minor (e.g., “I slapped my partner” or “I grabbed my partner”) to severe (e.g., “I slammed my partner against the wall” or “I used a knife or gun on my partner”) acts of violence. The reliability coefficients for *lifetime prevalence* and *past-year frequency* scores were .90 and .60 in this study respectively. The low reliability for self-reported Physical Assault on the *past-year frequency* scale was noted. However, deleting any item from the scale did not noticeably improve reliability. Thus, the full scale was utilized bearing in mind its limitations.

The *Psychological Aggression* scale is an eight-item scale measuring the frequency at which respondents engaged in a range of minor (e.g., insulting, shouting, or swearing) to severe (e.g., threatening to hit or throw something, or destroying something of their partners’) forms of psychological aggression. Only *past-year frequency* scores were used for this scale and the reliability coefficients was .77.

Singapore prison considers a short-term sentence to be less than a year whereas any sentence longer than a year is considered a long-term sentence. There was no difference in reliability scores on the CTS2 for inmates who had been in prison for a short-term sentence

(less than a year) as compared to inmates that had been in prison for long-term sentence (more than a year).

The Control Scale (Frankland, 2011) is a 17-item scale measuring the frequency of coercive control use within an intimate partnership. Each area of control measured including *threats* (e.g., I threatened to reveal my partner's sexuality to others), *intimidation* (e.g., I threatened to hurt or harm my partner), *dominance* (e.g., I monitored my partners time), *economic abuse* (e.g., I controlled or limited my partner's access to money), *emotional abuse* (e.g., I told my partner that they were crazy), and *isolation* (e.g., I made it difficult for my partner to see their friends or family) corresponded to dimensions on Pence and Paymar's (1986) 'Power and Control Wheel'. Items are measured on a scale from 0 (*Never*) to 6 (*More than 20 times*). For each item, respondents answer two questions: the first regarding the frequency of their own control use (self-report) and the second on the frequency of their partner's control use (partner-report). Only self-report scales were used in this study. The items were summed to produce an overall control score. Frankland (2011) reported a reliability coefficient of .85 for self-report from a convenience sample. In this study, the reliability was .84.

For questionnaires measuring attitudes and behaviours in relationships (ECR, CTS2, Control scale) participants were instructed to think about the past 12 months of their last relationship prior to incarceration when responding. No time frame was attached to the Feelings about self and the TAS-20 scales as these measured general attributes.

Data collection procedures

Research was conducted according to procedures approved by a university ethics board and the Singapore Prison Service. Surveys were conducted in groups and men were informed that participation was confidential, voluntary, and had no implications on their sentences.

Results

During analyses, data from participants were removed due to excessive missing data and/or unusual responding, for instance answering all questions at the extremes or with the same value, or appearing to “fake good” on the CTS by not endorsing any items on the psychological aggression scales. Participants who had never been in a previous relationship were removed. No participants were excluded for reasons relating to English proficiency. From the total sample of 99 men, 24 were removed and data from 75 men were used in final analyses.

To assess for violations of assumptions for statistical analyses, normality was examined. According to Kline (2005), skewness values > 3 and kurtosis values ≥ 10 are cause of concern. Skewness and kurtosis values for variables in this study were all within these limits, with the exception of physical assault (frequency scores) (skewness = 3.08; kurtosis = 11.95). A square-root transformation was performed and the distribution was normalized. Analyses used both transformed and untransformed variables for physical assault (frequency scores). As there were no significant differences in results generated, results from the untransformed data were used for the subsequent analyses.

For both the control and CTS scale, although the responses formed an ordinal scale, the ordinal categories were converted into frequency midpoints to reflect the frequency of each behaviour. Behaviours that occurred once were recorded as 1; twice (recorded as 2); 3-5 times (recorded as 4); 6-10 times (recorded as 8); 11-20 times (recorded as 15) and more than 20 times (recorded as 25). The remaining two categories were treated as zero. This allowed for the measure of the relative frequency of each behaviour, and were combined to provide estimated frequency scores for each subscale.

In Johnson's (2006) research, he identified two clusters of high and low control with a Ward method of cluster analyses. Although a cluster analysis is limited in producing groupings specific only to the present data, a K-means cluster was utilized because there was

existing knowledge about the number of clusters that characterize the variable. Hence, following Johnson's example, a K-means cluster analyses with two clusters was performed on standardized scores for the Control scale. This study categorized high controlling and physically violent inmates as controlling perpetrators and low controlling and physically violent inmates as non-controlling perpetrators. Overall, 65.3% (N=49) of men reported ever perpetrating physical IPV in their lifetime. Amongst physically assaultive men 27.7% (N=13) perpetrated controlling IPV.

Table 2 presents the mean, standard deviation, and minimum and maximum scores of variables in this study. Table 3 presents the correlations between all variables in the study. Correlations between variables across categories in the model were all less than .90 as recommended by Tabachnick and Fidell, (2001); indicating no problems with multicollinearity. It should be noted that avoidant attachment is not a variable in the RAC model, however it is presented together with rejection variables in tables for easy viewing.

[Insert Table 2 about here]

[Insert Table 3 about here]

Correlation analyses

First, both abuse variables were positively correlated. That is, higher levels of physical assault linked to higher levels of psychological aggression ($r(73) = .54, p < .01$).

Second, correlations were examined to determine the variables that were associated with IPV perpetration. It was found that only avoidant attachment positively correlated to physical assault ($r(73) = .27, p < .05$). None of the variables in the RAC model correlated to physical assault. This indicated that the preconditions to run a model fit analyses for physical assault were not present. Thus, physical assault was not used in further model fit analyses. As such, this study could also no longer compare the applicability of the RAC model between men who perpetrated controlling and non-controlling physically assault.

Conversely, avoidant attachment was not correlated to psychological aggression.

However, all the variables in the RAC model (anxious attachment [$r(73) = .25, p < .05$] shame [$r(73) = .33, p < .01$] and alexithymia [$r(73) = .33, p < .01$]) were positively correlated with psychological aggression. Notably, it was also observed that similar to psychological aggression, control was positively correlated to all the variables in the RAC model (anxious attachment ($r(73) = .27, p < .05$), shame ($r(73) = .26, p < .05$) and alexithymia ($r(73) = .33, p < .01$). Furthermore, control was highly correlated to psychological aggression ($r(73) = .60, p < .01$), suggesting that the same construct was being measured. Given these findings, control was included as a post-hoc alternative measure of psychological abuse (which interestingly appeared be a highly compatible measure of psychological abuse to the ABI used in Brown et al.'s (2010) study in terms of the types of items included).

For variables that were significantly correlated to abuse variables, a post-hoc regression was performed to determine the variance in abuse explained by each variable. These results are presented in Table 4.

[Insert Table 4 about here]

Third the correlations between variables along each path of the RAC model were examined. For the path of 1) *rejection-shame*: anxious attachment positively correlated to shame ($r(73) = .53, p < .01$); 2) *shame-alexithymia*: shame positively correlated to alexithymia ($r(73) = .62, p < .01$); 3) *alexithymia-abuse*: alexithymia positively correlated to psychological aggression ($r(73) = .33, p < .01$) and control ($r(73) = .33, p < .01$); 4) *abuse-rejection*: psychological aggression ($r(73) = .25, p < .05$) and control ($r(73) = .27, p < .05$) both positively correlated to anxious attachment. Therefore, it was found that the preconditions were present to run model fit analyses on two RAC models: Model 1 *anxious attachment-shame-alexithymia-psychological aggression-* and back to *-anxious attachment*; and Model 2 *anxious attachment-shame-alexithymia-control-* and back to *-anxious attachment*.

Last, the correlations between variables across paths not included in the model were examined. It was found that anxious attachments positively correlated to alexithymia ($r(73) = .47, p < .01$); and psychological aggression ($r(73) = .33, p < .01$) and control ($r(73) = .26, p < .05$) both positively correlated to shame. No doubt, these correlations were not ideal for the circular model proposed. However, given that variables were identified from existing evidence linking them to IPV, theoretically the correlations make sense. Therefore, in the subsequent model fit analyses, the feasibility of the RAC model without adding additional paths was first tested. Nevertheless, when the proposed model was did not fit well with the current sample, post-hoc analyses included these paths in the model to explore better fitting models.

Model fit analyses

To test the RAC model fit, the Analysis of Moment Structures (AMOS) version 19 (Arbuckle, 2010) was used to examine proposed models via structural equation modeling. There was no missing data and the full dataset was used. The stability indexes of the RAC models run were within the -1 to +1 range, demonstrating that the path coefficient estimates reported were stable (Arbuckle, 2006). To analyze results, a non-significant χ^2 is desired as this suggests that the default model fits the data. However due to the modest sample size, results needed to be considered with other model fit statistics, such as the root mean square error of approximation (RMSEA) as recommended by Thompson (2004) and in particular for this study, the comparative fit index (CFI) and the Tucker-Lewis index (TLI) indexes that are suited for analyses of smaller samples (Bentler, 1990). It was desired that the RMSEA was $< .06$ and the CFI and TLI values were close to 1 and $> .95$ respectively (Hu and Bentler, 1999).

Table 5 reports the results of testing Model 1. Results indicated that Model 1 did not fit the data well. Particularly, close analyses found that the psychological aggression-anxious attachment path was not significant. Given the poor model fit, alternative models were tested.

First, models previously tested by Brown et al., (2010) followed by models that were theoretically feasible were tested. The paths in the model were also tested in the opposite direction. Results indicated that none of the alternative models (1.1 to 1.4) fit well. As post-hoc analyses, the model fit indices produced by AMOS were examined. Drawing on model fit indices: 1. An anxious attachment-alexithymia path was added (Model 1.5 and 1.6). Although the models fit relatively well, the anxious attachment-alexithymia and psychological abuse-anxious attachment paths were not significant. Thus, these models were not theoretically useful. 2. A shame-psychological aggression path was added (Model 1.7 and 1.8) but the models did not fit well. 3. The modification indices indicated that the error for alexithymia and the error for anxious attachment covaried. Hence in Model 1.9 the errors were allowed to covary and the model was found to fit well. This result suggests that a common factor was influencing both anxious attachment and alexithymia variables, and needed to be added to the model to improve fit. Closer analyses found that the psychological abuse-anxious attachment path was not significant. Nevertheless, a linear path from anxious attachment-shame-alexithymia and psychological abuse was significant and theoretically useful.

Table 6 reports the results of testing Model 2. Results indicated that Model 2 fit the data well. Nevertheless, the control-anxious attachment path was not significant. Thus, the control-anxious attachment path was removed and a nested model (3.1) was run. The nested model fit the data well and a chi-square difference test indicated that removing the control-anxious attachment path did not significantly reduce model fit (χ^2 (1; N=75) = 2.27, $p = .87$). This suggested that a linear model explained the data equally well and was preferred. Nevertheless, due to the small sample size, post hoc power analyses were conducted with Mplus 7 (Muthen & Muthen, 1998-2012), which used the model results to define a population from which samples of varying size were drawn. It was found that with a sample of 210, the power for rejecting the null hypothesis of no relationship (at an alpha level of .05) for the four paths in the model were all .80 or higher. As a sample size of around 200 is modest, these

results support the suggestion that lack of power, and not necessarily the absence of relationship, may have limited the chances of finding a significant control-anxious attachment path. For pragmatic reasons, alternative models (3.2 to 3.4) were tested and found not to fit well.

Discussion

This study explored IPV from an attachment perspective in a male Singapore prison sample. First, the associations between a range of variables (including shame, alexithymia and insecure attachments) and IPV perpetration were examined. Second, the variables anxious attachment, shame, alexithymia and IPV perpetration were linked together to test a circular path of rejection-abuse theorized to explain forms of IPV stemming from anxious attachments.

Overall, it was found that 65.3% (N=49) of men self-reported perpetrating physical IPV in their lifetime; and amongst physically assaultive men, 27.7% (N=13) perpetrated controlling types of IPV. Notably however, the reliability for men's self-reported frequency of physical assault perpetration was poor. Thus, the frequency of men's physical assaults may be an inaccurate representation of its true occurrence. In fact, in a large-scale literature review, Margolin (1987) concluded that men were less likely than women to disclose their own perpetration. Moreover, in Singapore where "face" is a treasured value (Seow & Foo, 2006), "face" has been reported to particularly influence Chinese men (who made up the largest proportion in this sample) to feel the need to present themselves desirably (Li, 1999). For this reason, it is important that results pertaining to men's physical assault be interpreted cautiously.

Relationship between variables and IPV perpetration:

Avoidant attachment was the only variable correlated to physical assault. This suggested that men who cut-off from their feelings and preferred to avoid intimacy, were more likely to perpetrate physical IPV; possibly when intimacy was demanded of them. As

existing research involving IPV and avoidant attachment is inconsistent, the present results were consistent with some studies that reported significant associations (Babcock et al., 2000; Holtzworth-Munroe et al., 2000) but differed from others (Dutton et al., 1994; Holtzworth-Munroe et al., 1997; Orcutt, Garcia, & Pickett, 2005) that did not. None of the variables within the RAC model were associated to physical IPV. This was contrary to existing research reporting links between anxious attachment (Babcock et al., 2000; Henderson et al., 2005; Dutton et al., 1994; Holtzworth-Munroe et al., 1997), shame (Dutton et al., 1995; Harmon, 2002; Harper, 2005) and alexithymia (Yelsma, 1996) to IPV perpetration. As a result, the RAC model could not be tested on men's physical IPV perpetration. Furthermore, another aim of this study that was to test if the RAC model fit better with controlling as compared to non-controlling physically violent men could not be tested. Notably, these results should be interpreted with caution due to the poor reliability of men's self-reported physical assault perpetration; particularly given the inconsistency of findings with existing literature.

Conversely, avoidant attachment was not correlated with psychological IPV perpetration. Once again, because of the inconsistency in research regarding avoidant attachment and IPV, these results were consistent with some (Dutton et al., 1994; Holtzworth-Munroe et al., 1997; Orcutt, Garcia, & Pickett, 2005) but not other (Babcock et al., 2000; Holtzworth-Munroe et al., 2000) research. Notably however, all the variables in the RAC model (shame, alexithymia and anxious attachment) were correlated to psychological IPV perpetration. These significant correlations reflected results in existing research (Babcock et al., 2000; Henderson et al., 2005; Dutton et al., 1994; Dutton et al., 1995; Harmon, 2002; Harper, 2005; Holtzworth-Munroe et al., 1997; Yelsma, 1996) as well as in Brown et al.'s (2010) study. Results indicated that the pre-conditions to run the RAC on psychological IPV were present. Interestingly, it was also found that like psychological IPV perpetration, control was not correlated to avoidant attachment but was correlated to all the variables in the RAC model. Furthermore, control was highly correlated to psychological IPV, suggesting that the

same construct was being measured. For these reasons, control was used as a post-hoc measure of psychological abuse in model fit analyses. The next section discusses results from testing the RAC model on both psychological IPV and control.

Overall, results suggest that different attachment orientations and risk factors underlay psychological and physical IPV perpetration in this sample. Nevertheless, caution needs to be exercised when interpreting results due to poor reliability of men's self-reported physical IPV. Testing the applicability of the RAC model of IPV:

It was hypothesized that vulnerability to *rejection* (measured by anxious attachment) would lead to experiencing a *threat to self* (measured by shame) that would lead to *defending against threat* (measured by alexithymia) that would lead to *abuse* (measured by psychological and physical IPV) that ultimately would lead to further *rejection*. As stated, the RAC model could not be tested on physical IPV perpetration. Nevertheless, model fit analyses were run for psychological IPV and the post-hoc variable of control.

The first model tested the path of *anxious attachment-shame-alexithymia-psychological aggression* and back to *anxious attachment*. This model did not fit the present sample well. This result was inconsistent with Brown et al.'s (2010) results that this circular abuse pathway fit well with their sample of male batterers. Further investigation revealed several possibilities for the poor model fit in the present sample.

From post-hoc analyses of alternative models, the first reason deduced for the poor model fit was that an additional factor common to alexithymia and anxious attachment was influencing the model. Because the abuse-rejection path was non-significant, it was purported that an additional variable was required between this link to improve the model fit. While it is beyond the scope of this study to determine the additional variable, it is posited that compared to the culturally Western sample in Brown et al.'s (2010) study where the abuse-rejection pathway was reported to be significant; in traditionally more patriarchal societies as

Singapore, men's attitudes towards women could have played a more pronounced role in abuse and may need to be included as an intervening variable in future studies.

Second, closer analyses and comparison of the CTS2 (Straus et al., 1996) used in the present study and the Abusive Behaviour Inventory (ABI) (Shephard & Campbell, 1992) used in Brown et al.'s (2010) study to measure psychological IPV perpetration revealed that different aspects of psychological abuse were being measured. Specifically, it was found that beyond the domains of psychological aggression assessed by the CTS2, the ABI also assessed use of coercive control and humiliation. Thus, it was speculated that the restricted dimensions of psychological abuse measured by the CTS2 and not necessarily an invalid model limited the probability of finding good model fit.

For reasons already discussed, control was used as a post-hoc alternative measure of psychological abuse. Indeed, the model combination of *anxious attachment-shame-alexithymia-control* and back to *anxious attachment* fit well. Inadvertently, the Control scale (Frankland, 2011) was assessed to be a more compatible measure of psychological abuse to the ABI than the CTS2 as it incorporated all the dimensions of psychological abuse evaluated by the ABI. Therefore the good model fit when control was used as the measure of psychological abuse supports the previous speculation that it was the restricted dimensions of psychological abuse measured by the CTS2 and not necessarily an invalid model that limited the probability of finding good model fit. Notably however, the *control-anxious attachment* pathway was not significant. Instead, a linear model of *anxious attachment-shame-alexithymia-control* fit the present sample of men better than a circular model. That is, coercive control was not found to link back to or promote further anxious attachment as originally theorised. To explain this unexpected finding, it was purported that while it was predicted that abuse furthers rejection from an intimate partner, this may rarely be the case. For instance, it is known that a substantial proportion of women remain with partners even after being repeatedly abused (Feazelle, Mayers, & Deschner, 1984; McCollum & Stith,

2008). Thus the very continuation of the relationship following IPV may consequentially reduce feelings of rejection until a partner eventually (or perhaps never) leaves the relationship. Thus the abuse-rejection relationship is unlikely as straightforward as hypothesized and further research is needed to decipher its relationship. Nevertheless, before the abuse-rejection pathway and the circularity of the RAC is dismissed, it is important to note that post-hoc analyses suggested that the lack of power due to a small sample rather than an absence of a relationship, could have limited the chances of finding a significant abuse-rejection pathway between control and anxious attachment in the present study.

Pulling results together, it was found that physical IPV perpetration was only linked to avoidant attachment, but not to any of the variables (shame, alexithymia and anxious attachment) within the RAC model. On the other hand, psychological IPV and a post-hoc measure of control were not associated to avoidant attachment. However they were correlated to all the variables within the RAC model. As such, model fit analyses could not be conducted for physical IPV perpetration but were conducted for psychological IPV and control. Results suggested that the RAC model did not fit well with psychological IPV perpetration. However, adding a variable to the model significantly improved model fit. When control was used as the measure of abuse, partial support for the RAC model was found. Specifically, instead of a circular rejection-abuse pathway, a linear rejection-abuse pathway starting from anxious attachment and ending in control was found to fit well with the present sample of men. It must be noted that the reliability of men's physical IPV perpetration reports was poor. Thus, all results relating to men's physical abuse need cautious interpretation.

Being the first study to explore IPV in the context of an attachment framework in Singapore, it is advisable that further attachment-based research be conducted locally before firm conclusions are drawn. Nevertheless, results provide preliminary directions for interventions and future research that will briefly be discussed. First, results suggest that during assessments, it may be important to take into account perpetrators' attachment

orientations. This could help differentiate the distinct trajectories and underlying motivations of avoidant versus anxious types of IPV perpetration. Hence, perpetrators can be channeled towards appropriate interventions. For instance, results suggest that anxious batterers who perpetrate psychological IPV may benefit from interventions that focus on perpetrators' vulnerability to rejection and incorporate the stages of the rejection-abuse pathway. As it is beyond the scope of the present paper to detail intervention strategies, readers are referred to Brown's (2012) article for suggestions on how the rejection-abuse pathway may be integrated into treatment. Using the rejection-abuse pathway potentially offers both clinicians and perpetrators insight into how IPV escalates and also provides opportunities to explore relational situations that increase men's attachment anxieties and put intimates at risk. On the other hand, avoidant attachments may flag more severe types of IPV perpetration. As avoidant attachments are at the core of anti-social personalities (Tweed & Dutton, 1998; Waltz, Babcock, Jacobson, & Gottman, 2000), clinicians may be more vigilant towards perpetrators holding extremely hostile attitudes towards women (Lawson & Brossart, 2009); being more prone to treatment dropout (Chang & Saunders, 2002); and having an inability to empathize or feel remorse (Kraus & Reynolds, 2001). Despite these challenges, research has shown that interventions that reduced perpetrators' attachment avoidance resulted in reductions in violence severity (Lawson & Brossart, 2009). At this stage of research, results and hence suggestions remain preliminary. Thus, implications for interventions are meant to compliment; and not replace current interventions.

Limitations

The present research is limited in several ways. First, being a prison sample, reports were retrospective and likely impeded men's accuracy in recalling IPV behaviours. Second, due to the infancy of both attachment and IPV research in Singapore, existing questionnaires developed from the West were used. Effort was made to reduce any cultural misconceptions (e.g., using IPV and control measures that assessed specific behaviours and avoided using any

vague terms that could be have different meanings across cultures); and although attachment norms can vary across culture, the underlying experiences of people – which was the core focus of this study - have been found to be unanimous across culture (van Ijzendoorn and Sagi, 1999). Nevertheless, scorings were all still based on comparisons to Western norms and it would useful to validate and obtain local norms for these questionnaires, particularly in regards to attachment. Third, in this study, the observed model fit for pathways leading to control were conditional on post-hoc analyses. Thus, cross-validation on another sample is recommended, particularly given that the final sample used in analyses was relatively small. Fourth, the rejection-abuse pathways are restricted to men whose perpetration relate to rejection. Fifth, a lack of power was found to have possibly limited results. Last, results are limited to the present forensic sample and are not representative of the wider population. Thus results cannot be extrapolated to the broader Singapore community.

By taking the aforementioned limitations into account, future studies may be enriched. In addition, future studies could assess patriarchal views that possibly intervene in the rejection-abuse pathway. Furthermore, typical of an Asian society, IPV in Singapore remains taboo, thus the inclusion of a social desirability scale may be useful. This is especially important given the poor reliability of men's self-reported physical abuse. Future studies may also benefit from conducting a prospective power analyses to determine the minimum sample needed. Finally, in order to generalize results to the broader population, it would be beneficial to use a broader and larger sample from the community.

Conclusion

In the present sample of male prisoners, different risk factors were found to underlie physical and psychological IPV perpetration. Due to a lack of associations between relevant variables, the RAC model could not be tested on men's physical abuse. However, due to the poor reliability of men's self-reported physical assault perpetration, these results need cautious interpretation. While the associations between model variables and psychological

abuse were all present; contrary to expectation, the RAC model did not fit well. Yet, post-hoc analyses suggested that the model should not be prematurely dismissed as adding a variable to the model significantly improved fit. Additionally, a linear rejection-abuse pathway was found to fit well when control was used as a post-hoc alternative measure of psychological IPV. For these reasons, future research on the RAC model was deemed worthwhile and recommended. At this stage of research, results are preliminary and cannot be generalized beyond the present sample of male Singaporean inmates. Nevertheless, where findings have been consistent with research in the broader IPV research field, implications for integrating attachment based knowledge into existing perpetrator groups were briefly offered.

References

- Arbuckle, J. L. (2006). *AmosTM 7.0 User's Guide*. Chicago, IL: Amos Development Corporation/SPSS Inc.
- Arbuckle, J. L. (2010).). *IBM SPSS[®] AmosTM 19 User's Guide*. Crawfordville, FL: Amos Development Corporation.
- Babcock, J., C., Jacobson, N. S., Gottman, J., M., & Yerington, T., P. (2000). Attachment, emotional regulation, and the function of marital violence: Differences between secure, preoccupied, and dismissing violent and nonviolent husbands. *Journal of Family Violence*, 15(4), 391-409.
- Bagby, M., R, Parker, J., D. A, & Taylor, G., J. (1994). The twenty-item Toronto Alexithymia Scale-I. Item selection and cross-validation of the factor structure. *Journal of Psychosomatic Research*, 38(1), 23-32.
- Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin*, 107(2), 238-246.
- Bowen, M. (1978). *Family therapy in clinical practice*. New York: Aronson.
- Bowlby, J. (1988). *A secure base: Parent-child attachment and healthy human development*. New York: Basic Books.
- Brennan, K., A., Clark, C., L., & Shaver, P., R. (1998). Self-report measurement of adult attachment: An integrative overview. In J. Simpson, A. & S. Rholes, W. (Eds.), *Attachment theory and close relationships*. New York: The Guilford Press A Division of Guilford Publications, Inc.
- Brown, J. (2012). Male perpetrators, the gender symmetry debate, and the rejection-abuse cycle: implications for treatment. *American journal of men's health*, 6(4), 331-343. doi: 10.1177/1557988312439404

- Brown, J., James, K., & Taylor, A. (2010). Caught in the rejection-abuse cycle: are we really treating perpetrators of domestic abuse effectively? *Journal of Family Therapy*, 32(3), 280-307. doi: 10.1111/j.1467-6427.2010.00494.x
- Centers for Disease Control and Prevention. (2013). *Intimate partner violence: Definitions*. Retrieved from <http://www.cdc.gov/violenceprevention/intimatepartnerviolence/definitions.html>
- Chang, H., & Saunders, D. G. (2002). Predictors of attrition in two types of group programs for men who batter. *Journal of Family Violence*, 17, 273-292.
- Cassidy, J., & Shaver, P. R. (1999). *Handbook of attachment: Theory, research, and clinical applications*. New York: Guilford Press.
- Department of Statistics, Ministry of Trade and Industry, Republic of Singapore. (2010). *Census of population 2010: Advance census release*. Singapore: Author.
- Dobash, R. E., & Dobash, R. P. (1977). Wives: The appropriate victims of marital violence. *Victimology*, 2, 426-442.
- Dobash, R. P., & Dobash, R. E. (2004). Women's violence to men in intimate relationships: Working on a puzzle. *British Journal of Criminology*, 44, 324-349. doi: 10.1093/bjc/azh026
- Dozier, M., Stovall-McClough, K. C., & Albus, K. E. (2008). Attachment and psychopathology in adulthood. In J. Cassidy & P.R. Shaver (Ed), *Handbook of attachment: Theory, research, and clinical applications* (2nd ed.). (pp. 718-744). New York, NY, US: Guilford Press.
- Dutton, D. G. (1995). Male abusiveness in intimate relationships. *Clinical Psychology Review*, 15, 567-581.
- Dutton, D. G., van Ginkel, C., & Starzomski, A. (1995). The role of shame and guilt in the intergenerational transmission of abusiveness. *Violence and Victims*, 10(2), 121-131.

- Dutton, D., G., Saunders, K., Starzomski, A., & Bartholomew, K. (1994). Intimacy-anger and insecure attachment as precursors of abuse in intimate relationships. *Journal of Applied Social Psychology*, 24(15), 1367-1386.
- Edwards, V. J., Holden, G. W., Felitti, V. J., & Anda, R. F. (2003). Relationship between multiple forms of childhood maltreatment and adult mental health in community respondents: results from the adverse childhood experiences study. *American Journal of Psychiatry*, 160, 1453 -1460.
- Ehrensaft, M. K., Cohen, P., Johnson, J., & Chen, H. (2006). Development of personality disorder symptoms and the risk for partner violence. *Journal of Abnormal Psychology*, 474-483.
- Evren, C., Sar, V., Evren, B., Semiz, U., Dalbudak, E., & Cakmak, D. (2008). Dissociation and alexithymia among men with alcoholism. *Psychiatry and Clinical Neurosciences*, 62(1), 40-47.
- Feazelle, C. S., Mayers, R. S., & Deschner, J. P. (1984). Services for men who batter: Implications for programs and policies. . *Family Relations*, 33, 217-223.
- Fonagy, P. (1999). Psychoanalytic theory from the viewpoint of attachment theory and research. In J. Cassidy & P. Shaver (Eds.), *Handbook of attachment theory and research*. pp. 595-624. New York: Guilford Press.
- Frankland, A. (2011). *Domestic violence in same-sex relationships*. Doctor of Philosophy, Macquarie University, Sydney.
- Grabe, H. J., Rainermann, S., Spitzer, C., Gansicke, M., & Freyberger, H. J. (2000). The relationship between dimensions of alexithymia and dissociation. *Psychotherapy and Psychosomatics*, 69, 128-131.

- Harmon, P. A. (2002). Why do men batter women? Assessing empathy, self-regard and narcissism levels, and attitudes toward women, men's roles and family of origin experiences among middle to upper class male batterers. *Dissertation Abstracts International. Section B: The Sciences and Engineering*, 62 (12-B), 6023.
- Harper, F. W. K. (2005). The role of shame, anger, and affect regulation in men's perpetration of psychological abuse in dating relationships. *Journal of Interpersonal Violence*, 20(12), 1648-1662. doi: <http://dx.doi.org.simsrad.net.ocs.mq.edu.au/10.1177/0886260505278717>
- Henderson, A. J. Z., Bartholomew, K., Trinke, S. J., & Kwong, M. J. (2005). When loving means hurting: An exploration of attachment and intimate abuse in a community sample. *Journal of Family Violence*, 20(4), 219-230. doi: 10.1007/s10896-005-5985-y
- Holtzworth-Monroe, A., Meehan, J. C., Herron, K., Rehman, U., & Stuart, G. L. (2000). Testing the Holtzworth-Monroe and Stuart (1994) batterer typology. *Journal of Consulting and Clinical Psychology*, 68, 1000-1019.
- Holtzworth-Munroe, A., & Stuart, G. L. (1994). Typologies of male batterers: Three subtypes and the differences among them. *Psychological Bulletin*, 116(3), 476-497.
- Holtzworth-Munroe, A., Stuart, G. L., & Hutchinson, G. (1997). Violent versus nonviolent husbands: Differences in attachment patterns, dependency and jealousy. *Journal of Family Psychology*, 11(3), 314-331.
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6(1), 1-55.
- Johnson, M. P. (2006). Conflict and control: gender symmetry and asymmetry in domestic violence. [Review]. *Violence against women*, 12(11), 1003-1018. doi: 10.1177/1077801206293328

- Kline, R. B. (2005). *Principles and practice of structural equation modeling*. New York: The Guilford press.
- Kraus, G., & Reynolds, D. J. (2001). The "a-b-c's" of the cluster b's: Identifying, understanding, and treating cluster b personality disorders. *Clinical Psychology Review, 21*(3), 345-373.
- Lawson, D. M., & Brossart, D. F. (2009). Attachment, interpersonal problems, and treatment outcome in group therapy for intimate partner violence. *Psychology of Men & Masculinity, 10*(4), 288-301. doi: 10.1037/a0017043
- Lawson, D. M., Weber, D., Beckner, H. M., Robinson, L., Marsh, N., & Cool, A. (2003). Men who use violence: Intimate violence versus non-intimate violence profiles. *Violence and Victims, 18*, 259-277.
- Margolin, G. (1987). The multiple forms of aggressiveness between marital partners: How do we identify them? *Journal of Marital and Family Therapy, 13*(7-84).
- Li, C. L. S. D. (1999). Face orientation and self-disclosure of ability and morality: Does gender make a difference? (Doctoral dissertation). The University of Hong Kong, Hong Kong, China.
- Mauricio, A. M., & Tein, J. (2007). Borderline and antisocial personality scores as mediators between attachment and intimate partner Violence. *Violence and Victims, 22*(2), 139-157.
- McCollum, E. E., & Stith, S. M. (2008). Couples treatment for interpersonal violence: A review of outcome research literature and current clinical practices. *Violence and Victims, 23*(2), 187-201.
- McIlwain, D., & Warburton, W. (2005). The feelings about self scale: measuring internalised shame. *Unpublished Manuscript*, Macquarie University.
- Mihalic, S. W., & Elliott, D. (1997). A social learning theory model of marital violence. *Journal of Family Violence, 12*, 21-47.

- Mikulincer, M., Florian, M., Cowen, P. A., & Cowen, C. P. (2002). Attachment security in couple relationships: A systematic model and its implications for family dynamics. *Family Process, 41*(3), 405-434.
- Nathanson, D. L. (1992). *Shame and Pride: Affect, Sex, and the Birth of the Self*. New York: W.W. Norton.
- Nemiah, J. C., Freyberger, H., & Sifneos, P. E. (1976). Alexithymia: A view of the psychosomatic process. In O. Hill (Ed.), *Modern trends in psychosomatic medicine* (pp. 430-439). London & Boston: Butterworth.
- Orcutt, H. K., Garcia, M., & Pickett, S. M. (2005). Female-perpetrated intimate partner violence and romantic attachment style in a college student sample. *Violence and Victims, 20*(3), 287-302.
- Pence, E., & Paymar, M. (1986). *Power and control: Tactics of men who batter*. Duluth MN: Minnesota Program Development, Inc.
- Rathus, J. H., & O'Leary, D. (1997). Spouse-specific dependency scale: scale development. *Journal of Family Abuse, 12*, 159-168.
- Ross, J. M., & Babcock, J. C. (2009). Proactive and Reactive Violence among Intimate Partner Violent Men Diagnosed with Antisocial and Borderline Personality Disorder. *Journal of Family Violence, 24*(8), 607-617. doi: 10.1007/s10896-009-9259-y
- Shepard, M. F., & Campbell, J. A. (1992). The abusive behaviour inventory. *Journal of Interpersonal Violence, 7*, 291-305.
- Sonkin, D. J., & Dutton, D. (2003). Treating assaultive men from an attachment perspective. *Journal of Aggression, Maltreatment & Trauma, 7*(1-2), 105-133. doi: 10.1300/J146v07n01_06
- Straus, M. A. (1976). Sexual inequality, cultural norms, and wife-beating. *Victimology, 1*, 54-70.
- Straus, M. A. (1977). Wife beating: How common and why? *Victimology, 2*, 443-458.

- Straus, M. A., Hamby, S. L., Boney-McCoy, S., & Sugarman, D. B. (1996). The Revised Conflict Tactics Scales (CTS2): Development and Preliminary Psychometric Data. *Journal of Family Issues* 17(3), 283–316.
- Tabachnik, B. G., & Fidell, L. S. (2001). *Using multivariate statistics (4th ed.)*. Needham Heights, MA: Allyn & Bacon.
- Tangney, J. P., Wagner, P., Fletcher, C., & Gramzow, R. (1992). Shamed into anger? The relation of shame and guilt to anger and self-reported aggression. *Journal of Personality and Social Psychology*, 62(4), 669-675.
- Thompson, B. (2004). *Exploratory and confirmatory factor analysis: Understanding concepts and applications*. Washington, DC, US: American Psychological Association.
- Tutkun, H., Savas, H. A., Zoroglu, S. S., Esgi, K., Herken, H., & Tiryaki, N. (2004). Relationship between alexithymia, dissociation and anxiety in psychiatric outpatients from Turkey. *Israel Journal of Psychiatry and Related Sciences* 41(2), 118-124.
- Tweed, R. G., & Dutton, D. G. (1998). A comparison of impulsive and instrumental subgroups of batterers. *Violence and Victims*, 13(3), 217-230.
- van IJzendoorn, M. H., & Sagi, A. (1999). Cross-cultural patterns of attachment: Universal and contextual dimensions. In J. Cassidy & P. Shaver (Eds.), *Handbook of attachment*. New York: Guilford.
- Waltz, J., Babcock, J., Jacobson, N., & Gottman, J. (2000). Testing a typology of batterers. *Journal of Consulting and Clinical Psychology*, 68, 658-669.
- Yelsma, P. (1996). Affective Orientations of Perpetrators, Victims, and Functional Spouses. *Journal of Interpersonal Violence*, 11(2), 141-161. doi: 10.1177/088626096011002001

Tables and Figures

Table 1

Demographic information

Characteristic	Men
Ethnicity	
Malay	35%, N=26
Chinese	40%, N=30
Indian	12%, N= 9
Others	13%, N=10
Sentencing	
Average length of incarceration (years)	1.2
Average full sentence (years)	4
Relationship Status	
Involvement in a relationship at the time of study	50%, N=38
Average relationship length (years)	6.5
Average number of previous relationships	2.5
Average length of previous relationships (years)	4
Offences	
Drug related	48%, N=36
Theft/robbery	24%, N=18
Other offences (including violent and non-violent)	28%, N=21
Involvement in violent crime	
Total involved in violent crime	47%, N=34
Toward a stranger	71.43%, N=25
Toward a known person/family member	17.14%, N=6
Toward an intimate partner	5.70%, N=2
Toward a child	5.70%, N=2
Personal protection order (PPO)	
Percentage yes	9.3%, N=7
Duration of PPO (months)	14

Note. The total N varies for each characteristic due to missing data

Table 2

Sample size, means, standard deviations, minimum and maximum scores on all variables

		N	Mean	Standard Deviation	Minimum	Maximum
Abuse	Physical Assault	75	13.04	27.74	0.00	164.00
	Psychological Aggression	75	21.67	32.37	0.00	152.00
	Control	75	17.01	17.47	0.00	71.00
Rejection	Avoidant Attachment	75	3.21	0.86	1.00	5.22
	Anxious Attachment	75	4.10	0.9	1.72	6.39
	Threat to self Shame	75	66.11	13.79	37.00	105.00
Defence against threat	Alexithymia Total scale	75	54.03	12.05	26.00	86.00

Table 3

Inter-correlations of variables

Variables		1	2	3	4	5	6	7
Abuse	1 Physical Assault	-						
	2 Psychological Aggression	.54**	-					
	3 Control	.59**	.60**	-				
Rejection	4 Avoidant Attachment	.27*	0.13	0.2	-			
	5 Anxious Attachment	0.07	.25*	.27*	0.05	-		
	6 Shame	0.16	.33**	.26*	.43**	.53**	-	
Threat to self Defence against threat	7 Alexithymia	0.11	.33**	.33**	.33**	.47**	.62**	-

Note. ***Correlation is significant at the .001 level (2-tailed)

**Correlation is significant at the .01 level (2-tailed)

*Correlation is significant at the .05 level (2-tailed)

Table 4

Linear regression of Anxious and Avoidant attachment variables on Psychological and Physical abuse variables

Dependent Variable	Predictive variable	<i>B</i>	<i>SE</i>	β	<i>T</i>	<i>df</i>	<i>R</i> ²	<i>F</i>	<i>p</i>
Physical Assault	Avoidant attachment	8.82	3.63	0.27	2.43	72	0.08	5.90	0.02
Psychological Aggression	Anxious attachment	9.00	4.08	0.25	2.20	72	0.06	4.85	0.03
	Shame	0.77	0.26	0.33	2.95	72	0.11	8.71	0.00
	Alexithymia	0.88	0.30	0.33	2.94	72	0.11	8.66	0.00
Control	Anxious attachment	5.15	2.19	0.27	2.35	72	0.07	5.51	0.02
	Shame	0.33	0.14	0.26	2.30	72	0.07	5.30	0.02
	Alexithymia	0.47	0.16	0.33	2.94	72	0.11	8.64	0.00

Table 5.

Model	Variables	χ^2 (p), df	CFI	TLI	RMSEA	Stability index	Standardized path coefficients
1	ANX-SHA-ALEX-PSY-ANX	3.85(1.46), 2	0.97	0.92	0.11	0.12	.50***, .61***, .28*, .17
1.1	PSY-ALEX-ANX-SHA-PSY	18.66***, 2	.76	.27	.34	.13	.27*, .44***, .50***, .27*,
1.2	SHA-ALEX-ANX-PSY-SHA	9.31**, 2	.89	.68	.22	0.116	.61***, .44***, .18, .28*
1.3	ANX-ALEX-SHA-PSY-ANX	9.31*, 2	.89	.68	.22	.12	.44***, .61***, .28*, .18
1.4	PSY-ALEX-SHA-ANX-PSY Opposite direction model	3.85(.15), 2	.97	.92	.11	.12	.28*, .61***, .50***, .17
1.5	ANX-SHA-ALEX-PSY-ANX Add ANX-ALEX path	1.39(.24), 1	.99	.97	.07	.11	.51***, .52***, .27*, .17 .14
1.6	ANX-SHA-ALEX-PSY-ANX Add ALEX- ANX path	1.39(.24), 1	.99	.97	.07	.17	.41***, .55***, .30*, .23 .11
1.7	ANX-SHA-ALEX-PSY-ANX Add SHA-PSY path	2.90(.09), 1	.97	.83	.16	.10	.50***, .62***, .20, .15 .12
1.8	ANX-SHA-ALEX-PSY-ANX Add PSY-SHA path	2.90(.09), 1	.97	.83	.16	.13	.48***, .60***, .21, .12 .19
1.9	ANX-SHA-ALEX-PSY-ANX Add covariance between errors for ALEX and ANX	1.12(.29), 1	1	.99	.04	.10	.51***, .53***, .29*, .14

Results of testing Model 1

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

Variables: ANX-Anxious Attachment, SHA-shame, ALEX-Alexithymia, PSY-Psychological Aggression, CONT-Control.

Coefficients: The order of the standard path coefficients follows the paths linked by hyphens in the variables column. For instance, in Model 1, a 1 SD increase in ANX is associated with a significant ($p < .001$) .50 SD increase in SHA; a 1SD increase in SHA is associated with a significant ($p < .001$) .61 increase in ALEX and a 1SD increase in ALEX is associated with a significant .28 ($p < .05$) increase in PSY; a 1 SD increase in PSY is associated with a non-significant .17 SD increase in ANX.

Table 6.

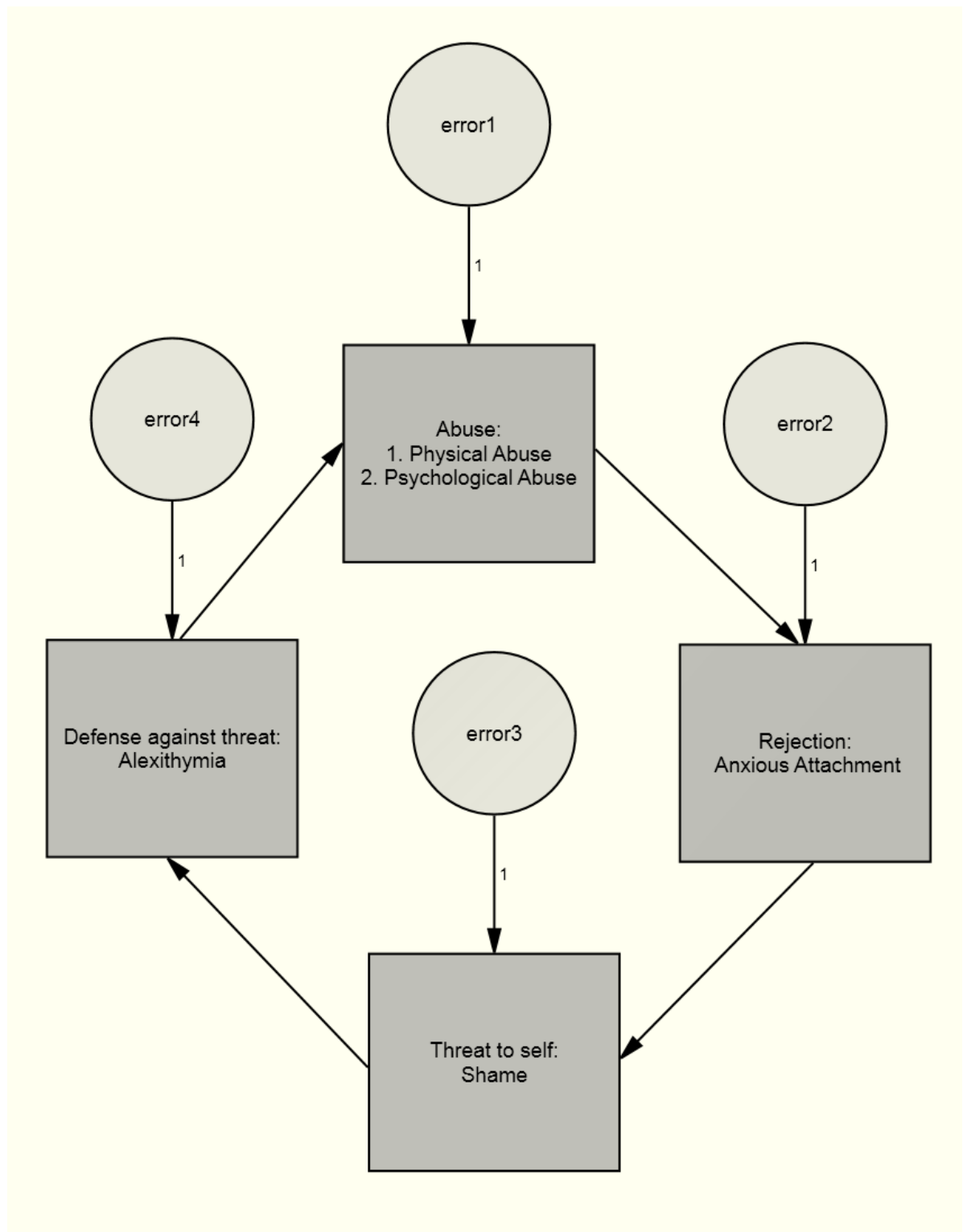
Results of testing Model 2

Model	Variables	χ^2 (p), df	CFI	TLI	RMSEA	Stability index	Standardized path coefficients
2	ANX-SHA-ALEX-CONT-ANX	2.47(.29)	0.99	0.98	0.06	0.12	.5***, .61***, .27*, .19
2.1	ANX-SHA-ALEX-CONT	4.74(.19), 3	0.97	0.95	0.09	-	.53***, .62***, .33**
2.2	SHA-ALEX-ANX-CONT-SHA	10.49(5.24)	0.87	0.62	0.24	0.11	.61***, .44***, .21, .21
2.3	SHA-CONT-ALEX-ANX-SHA	20.23***, 2	0.73	0.19	0.35	1.1	.20, .28*, .44***, .51***
2.4	ANX-ALEX-SHA-CONT-ANX	10.49*, 2	0.87	0.62	0.24	1.1	.44***, .61***, .21, .21

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

Variables: ANX-Anxious Attachment, SHA-shame, ALEX-Alexithymia, CONT-Control.

Figure 1.

The rejection abuse cycle model

CHAPTER 4.

Exploring a rejection-abuse cycle model of intimate partner violence in women
from a Singapore prison

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Abstract

Using an attachment framework, intimate partner violence (IPV) in 96 female Singaporean prisoners was examined. First, the relationships between a range of variables including shame, alexithymia and insecure (anxious and avoidant) attachments, and IPV perpetration were examined. Second, the variables of anxious attachment, shame, alexithymia and IPV perpetration were linked together to test how well a rejection-abuse cycle (RAC) model of IPV – originally proposed to explain male IPV perpetration – fit with women's IPV perpetration. Contrary to expectation, the only association with IPV perpetration was between shame and psychological IPV. Nevertheless, post-hoc analyses revealed that although insecure attachments were not related to IPV perpetration per se, anxious attachment was associated to women's coercive control. Given the overall lack of associations between variables, the RAC model could not be tested. Thus, the model was unhelpful in explaining IPV perpetration by women inmates. Results suggest that different models are needed to explain men and women's IPV perpetration. This paper discusses the implications, limitations of findings, and directions for future research.

Keywords: Intimate partner violence, attachment, rejection, Singapore, women

Exploring a rejection-abuse cycle model of intimate partner violence in women from a
Singapore prison

The image of a woman beating a man remains peculiar and at odds with traditional gender roles. Yet, to date over 200 studies evidence that not only men but also women perpetrate intimate partner violence (IPV) (Fiebert, 2010). IPV is defined as “physical, sexual or psychological harm by a current or former partner or spouse” that can occur between “heterosexual or same-sex couples and does not require sexual intimacy” (Centers for Disease Control and Prevention: CDC, 2013). IPV may differ in frequency and severity and occurs on a “continuum, ranging from one hit that may or may not impact the victim to chronic, severe battering (CDC, 2013). Whether or not this definition applies equally to women’s IPV perpetration as it does to men’s, remains controversial. Nevertheless, while women were originally thought to perpetrate primarily out of self-defense, (Hamberger & Potente, 1994; Johnson, 2006; Swan & Snow, 2002), emerging research suggest that women also perpetrate with intentions to control (Brownridge, 2010; Graham-Kevan & Archer, 2003; Larouche, 2005); and do so at levels of severity comparable to men (Straus 2011; Black et al., 2011; Langhinrichsen-Rohling, Selwyn, & Rohling, 2012). Therefore, as current theories remain primarily focused on men’s violence, there is a need to explore models of IPV to explain women’s perpetration. Of existing theories, attachment theory applies across gender and has been underscored to have promise for furthering our understanding of IPV (Sonkin & Dutton, 2003). Yet, to date, little research has focused on explaining female IPV perpetration from an attachment perspective. For this reason, this study first examined the relationship between a range of variables; including insecure attachments, shame, and alexithymia, and women’s IPV perpetration. Second, it tested to see if some of the variables linked together to form a circular path of rejection-abuse. Particularly, this study explored how well a rejection-abuse cycle (RAC) model of IPV – originally developed by Brown, James and Taylor, (2010) to explain men’s violence – applied to women’s IPV perpetration.

Anxiously attached adults fear and are sensitive to threats of rejection. When threatened, many regulate anxiety by demanding closeness and some become aggressive to achieve proximity (Babcock, Jacobson, Gottman, & Yerington, 2000; Bartholomew & Allison, 2006). Indeed, research has consistently reported links between attachment anxiety and women's IPV perpetration (Bookwala & Zdaniuk, 1998; Carney & Buttell 2005; Henderson, Bartholomew, Trinke, & Kwong, 2005; O'Hearn & Davis, 1997; Orcutt, Garcia & Pickett, 2005; Roberts and Noller, 1998). Conversely, avoidantly attached adults tend to cut-off from painful feelings and avoid intimacy when feeling vulnerable (Mikulincer, Florian, Cowen & Cowen, 2002). As such, they are thought to remove themselves from dysfunctional relationships before they escalate to IPV (Henderson et al., 2005). Yet, avoidant adults may also aggress to gain control when feeling smothered (Mayseless, 1991). Reflecting its two-pronged conceptualization, research linking attachment avoidance to women's IPV perpetration has not been consistent and is also limited. Of the studies found, one reported a link between avoidant attachment and women's IPV perpetration (O'Hearn & Davis, 1997) whilst others did not (Roberts & Noller, 1998; Bookwala & Zdaniuk, 1998; Orcutt et al., 2005). Thus, drawing upon the more consistent evidence linking anxious attachment to IPV perpetration, the RAC model explores a pathway of IPV stemming from rejection sensitivity experienced by a subset of anxiously attached individuals.

In this subset of anxiously attached individuals, when real or perceived rejection is experienced, vivid past rejection trauma followed by shameful feelings of being unworthy are triggered (Stosny, 1995). To these individuals, shame is experienced as a depletion of the 'self' and they subsequently do anything that helps defend against this threat (Brown et al., 2010). Brown et al. (2010) theorized that one way anxious individuals survive is by emotionally cutting-off via alexithymia. When using alexithymia, individuals may feel emotional pain, however are unable to identify, differentiate or describe their emotions (Nemiah, Freyberger & Sifeneos, 1976). Alexithymia has been linked to dissociation (Evren,

Sar, Evren, Semiz, Dalbudak, & Cakmak, 2008), a strategy associated with managing trauma-related memories and painful emotions (Tutkun, Savas, Zoroglu, Esgi, Herken, & Tiryaki, 2004; Grabe, Rainermann, Spitzer, Gansicke, & Freyberger, 2000). Both dissociation and alexithymia involve the denial and hence reduction of the subjective experience of painful emotions. Thus, theoretically alexithymia could reduce impulses towards IPV and is probably the intent of the perpetrator. Denial however only temporarily blocks emotional pain; and research by Nemiah (1976) suggests that during highly stressful situations, individuals who cope via alexithymia experience intensified physiological reactions. Thus, the numbing of painful feelings may on the contrary exacerbate aggression because the individuals are not conscious of any physiological or psychological warning signals of emotional built up prior to what seems like a sudden emotional explosion (Brown, 2012). Further, because alexithymia minimizes feelings, it desensitizes an individual from their feelings and arguably increases the likelihood of abuse. For these reasons, during heightened inter-partner conflicts, the surge of pent up feelings of shame is so overwhelming that all attempts to eliminate them via alexithymia are unsuccessful. Thus, diminishing the source of shame becomes essential for psychological survival (Brown et al., 2010). Through attacking a partner, the perpetrator regains a sense of control which helps repair a damaged sense of self (Nathanson, 1992; Brown et al., 2010). Aggression therefore serves to “control” distress by “controlling” the source of shame and protects the aggressor from further condemnation (Tangney, Wagner, Fletcher & Gramzow, 1992). While seemingly counteractive, rage serves as a desperate attempt to manage feelings of rejection and regain contact (Bowlby, 1988). Although a partner may remain, possibly out of fear, instead of reducing abandonment as the raging adult hopes, aggression likely encourages further rejection and eventual abandonment. Piecing together the foregoing discussion, the RAC cycle adapted from Brown et al. (2010) was described where: (1) An anxiously attached individual experiences an intimate’s behavior as rejecting that triggers reminders of past attachment trauma; (2) The individual’s sense of self

is threatened, evoking feelings of shame; (3) The individual uses alexithymia to defend against this threat; (4) Alexithymia not only fails to alleviate emotional pain during intense conflict but also has the effect of desensitizing an individual from their feelings. Thereby paving the way and resulting in IPV perpetration; (5) IPV itself exacerbates rejection from a partner thereby maintaining the RAC.

From a pilot study of 66 men attending a community IPV treatment program in Australia, Brown et al. (2010) reported support for the RAC model where: *rejection* (measured via anxious attachment and hostile childhood punishment) led to a *threat to self* (measured via shame and a sense of self), that led to *defense against threat* (measured via alexithymia) that led to *psychological abuse* that ultimately led back to *rejection*. Thus, at this stage of research, preliminary evidence supporting the applicability of the RAC model to men's psychological abuse has been reported.

Furthermore, demonstrating the relevance of Brown et al.'s (2010) chosen factors for the model; research has reported links between the independent factors within the RAC model and IPV. Notably, the RAC model was developed to explain male violence. As such, evidence supporting the theory for the model primarily stems from male data. However, where possible, this paper will incorporate evidence from female data. Although at this stage of research, this remains limited. First, the association between anxiously attached women (vulnerable to rejection) and IPV perpetration has been illustrated. Next, research has demonstrated strong associations between shame and IPV perpetration in men (Dutton, van Ginkel, & Starzomski, 1995; Harmon, 2002; Harper, 2005). In comparison to the other variables in the model, alexithymia has received less attention within IPV research despite its theoretical relevance (Brown et al., 2010; Keltikangas-Jarvinen, 1982; Yelsma, 1996). Nevertheless, one study by Yelsma's (1996) found that male batterers experienced significantly higher levels of alexithymia than functional spouses and were less able to own or express their feelings. Indeed, the RAC model was originally proposed to explain men's IPV

perpetration and evidence supporting the utility of the RAC model primarily stems from male data. However, reasons explaining why it is believed that the RAC model applies equally to women's IPV perpetration are subsequently presented.

In a recent literature review on all known IPV studies at the time, Hamel (2012) found little sex differences between risk factors, motivation and demographic characteristics in IPV perpetrators. More important to this study, because extensive research has demonstrated links between attachment anxiety and IPV perpetration by both men (Babcock et al., 2000; Henderson et al., 2005; Dutton, Saunders, Starzomski, & Bartholomew 1994; Holtzworth-Munroe, Stuart & Hutchinson, 1997) and women (Bookwala & Zdaniuk, 1998; Carney & Buttell 2005; Henderson et al., 2005; O'Hearn & Davis, 1997; Orcutt et al., 2005; Roberts & Noller, 1998); it is expected that the RAC model –that depicts a pathway to abuse from anxious attachments- will apply across sex. Thus, a primary aim of this study is to explore the cross-gender applicability of the RAC model. Particularly, this study also chose to employ a Singaporean forensic sample for several reasons. First, Brown et al. (2010) could not validate their model on physical IPV because the level of physical assault in their sample was too low to be meaningfully tested. Thus it was expected that a criminal sample would increase the likelihood of measuring physical IPV upon which to test the RAC model. Next, a Singaporean sample was chosen because it offered a culturally diverse mix of Chinese, Malay, Indian and other ethnicities (Department of Statistics Singapore, 2010) that differed to Brown et al.'s culturally Western Australian sample. Furthermore, patriarchal family values remain more pronounced in Singapore's Asian society than they do in more gender-equivalent Western nations. Hence, this allowed the relevance of the RAC model on a more ethnically diverse and patriarchal sample to be tested. Indeed, the fundamental processes underlying attachment are believed to be unanimous across cultures (Cassidy & Shaver, 1999; van Ijzendoorn & Sagi, 1999); suggesting that the RAC model too will apply across cultures. Last, early dysfunctions in attachment relationships are believed to be the foundation of borderline

personality development (Dozier, Stovall-McClough, Albus, Cassidy, & Shaver, 2008) and widespread research has reported associations between borderline personalities and IPV perpetration in women (Ross, 2011; Hughes, Stuart, Gordon, & Moore, 2007; Walsh et al., 2010). Because the severity of IPV is linked to level of pathology (Edwards, Holden, Felitti, & Anda, 2003; Lawson et al., 2003), borderline personalities are thought to mostly prevail amongst incarcerated IPV perpetrators (Mauricio, Tein & Lopez, 2007). Therefore prisoners were chosen to increase the relevance of testing a pathway of abuse stemming from impaired attachments.

Although largely based on Brown et al. (2010), this study expanded on their research by employing more widely used psychometric tests. Instead of using the Abusive Behavior Inventory (ABI) (Shephard & Campbell, 1992) and the Spouse-specific Dependency Scale (Rathus & O’Leary, 1997), this study used the Revised Conflict Tactics Scale (CTS2) (Straus, Hamby, Boney-McCoy, & Sugarman, 1996) and the Experiences in Close Relationships (ECR; Brennan, Clark, & Shaver, 1998) scale to measure IPV perpetration and attachment respectively. The CTS2 and the ECR are both more extensively used scales, that allow for more effective cross-study comparisons. Furthermore, Johnson (2006), one of the most cited researchers in the IPV field asserted that conclusions could not be drawn from research that failed to differentiate between the types of IPV perpetrated. Therefore, drawing upon Johnson’s (2006) method of distinguishing IPV types, a control scale was included to separate controlling from non-controlling IPV.

Synthesizing the foregoing discussion, this study first explored the relationship between the variables within the RAC model (including anxious attachment, shame, and alexithymia) and women’s IPV perpetration. In addition, avoidant attachment was included as a variable to further explore of the relationship between insecure types of attachment to women’s IPV perpetration. Based on research already presented showing consistent links between variables within the RAC model and IPV perpetration, it was hypothesized that anxious attachments,

shame, and alexithymia would be positively correlated with IPV perpetration. However, because research linking avoidant attachments to IPV perpetration is less consistent, the relationship between avoidant attachment and IPV in this study was exploratory. Second, this study tested the applicability of the RAC model to the present sample. Specifically, it was expected that the variables of anxious attachment, shame, alexithymia and physical and psychological IPV perpetration would link to form a circular model of IPV perpetration. That is, it was hypothesized that *rejection* (measured via anxious attachment) would lead to a *threat to self* (measured via shame); which would lead to *defense against threat* (measured via alexithymia); which then would lead to *abuse* (measured by physical and psychological abuse). Finally *abuse* would lead back to *rejection* and the RAC would be maintained. The model was tested on psychological and physical IPV and is diagrammatic presented in Figure 1. Last, Brown et al. (2010) suggested that their model was appropriate for some but not all perpetrators and this research explored whether women who were more controlling were more likely to fit the model.

[Insert Figure 1 about here]

Methods

Participants

This study randomly surveyed 96 females (21 years and above) from the Singapore Prison Service. Women were incarcerated for general offences, excluding murder and/or sexual offences. Participants had a minimum secondary school education to ensure sufficient English proficiency to comprehend questionnaires. The demographic details of participants are summarized in Table 1.

[Insert Table 1 about here]

Measures

Demographic information including women's ethnicity, sentence length, relationship status, and offence type were collected together with the following questionnaires.

Experiences in Close Relationships (ECR; Brennan et al., 1998): This is a 36-item scale with 18 items measuring avoidant attachment (e.g., "I try to avoid getting too close to my partner" or "I prefer not to show a partner how I feel deep down") and 18 items measuring anxious attachment (e.g., "I worry about being abandoned" or "sometimes I feel that I force my partners to show more feeling, more commitment") in relation to adult intimate relationships. Each item is rated on a seven-point scale from 1 (*Disagree strongly*) to 7 (*Agree strongly*). Brennan, et al., (1998) reported the reliability coefficients on a sample of 1,086 undergraduates to be .94 for avoidant and .91 for anxious attachment. In this study the reliability coefficients for avoidant and anxious attachment were .84 and .85 respectively.

Feelings about self scale (McIlwain & Warburton, 2005): This is a 20-item scale measuring participant attributes relating to self-esteem and shame. Example of items include "It's only a matter of time before people discover I'm a fake" and "Sometimes I just want to hide". On a six-point scale, each item is rated from 1 (*completely untrue of me*) to 6 (*describes me perfectly*). McIlwain and Warburton (2005) reported the reliability coefficient for 1,347 undergraduates to range from .94 to .96. In this study, reliability was .82.

Toronto alexithymia scale (TAS-20) (Bagby, Parker & Taylor, 1994). This is a 20-item scale measuring the inability to recognize, discriminate or describe feelings. The TAS-20 provides an overall measure of alexithymia by combining three components of alexithymia - difficulty identifying feelings (e.g., "I have feelings that I can't quite identify"); difficulty describing feelings (e.g., "It is difficult for me to find the right words for my feelings"); and externally oriented thinking (e.g., "I prefer talking to people about their daily activities rather than their feelings"). Responses are rated on a five-point scale ranging from 1 (*Strongly*

disagree) to 5 (*Strongly agree*). Bagby et al. (1994) reported the reliability coefficient on 965 undergraduates to be .86 for overall alexithymia. In this study, reliability was .82.

Revised Conflict Tactics Scale (CTS2) (Straus et al., 1996). The CTS2 is a scale measuring 39 IPV behaviors that intimate partners engage in. For each of the 39 behavior items, respondents answer two questions regarding the frequency of the behavior: the first concerning their own perpetration (self-report) and the second concerning their partner's perpetration (partner-report). Each question is rated on a scale from 0 (*Never*) to 6 (*More than 20 times*) about the frequency at which IPV was perpetrated in the past 12 months, or respondents could endorse 7 (*Not in the last year but before*). Straus and colleagues (1996) reported subscale internal consistency reliabilities to vary from .79 to .95.

In this study, only self-report scales were used with two types of scorings: “*prevalence*” (yes or no) scores and “*frequency*” (how often) scores. *Lifetime prevalence* scores measured if respondents had ever perpetrated IPV in their lifetime. These scores were used in combination with *control* scores to determine IPV types. *Past-year frequency scores* measured how many times respondents perpetrated IPV in the past 12 months ‘of their last relationship prior to incarceration’. These scores were used in model fit analyses. The *Physical Assault and Psychological Aggression* subscales from the CTS2 were used in this study and are described below.

The *Physical Assault* scale is a 12-item scale measuring the frequency at which respondents engaged in a range of minor (e.g., “I slapped my partner” or “I grabbed my partner”) to severe (e.g., “I slammed my partner against the wall” or “I used a knife or gun on my partner”) acts of violence. The reliability coefficients for lifetime *prevalence* and *past-year frequency scores* were .85 and .76 in this study respectively.

The *Psychological Aggression* scale is an eight-item scale measuring the frequency at which respondents engaged in a range of minor (e.g., insulting, shouting, or swearing) to severe (e.g., threatening to hit or throw something, or destroying something of their partners’)

forms of psychological aggression. Only *past-year frequency* scores were used for this scale and the reliability coefficients was .87.

Singapore prison considers a short-term sentence to be less than a year whereas any sentence longer than a year is considered a long-term sentence. There was no difference in reliability scores on the CTS2 for inmates who had been in prison for a short-term sentence (less than a year) as compared to inmates that had been in prison for long-term sentence (more than a year).

The Control Scale (Frankland, 2011) is a 17-item scale measuring the frequency of coercive control use within an intimate partnership. Each area of control measured including *threats* (e.g., I threatened to reveal my partner's sexuality to others), *intimidation* (e.g., I threatened to hurt or harm my partner), *dominance* (e.g., I monitored my partners time), *economic abuse* (e.g., I controlled or limited my partner's access to money), *emotional abuse* (e.g., I told my partner that they were crazy), and *isolation* (e.g., I made it difficult for my partner to see their friends or family) corresponded to dimensions on Pence and Paymar's (1986) 'Power and Control Wheel'. Items are measured on a scale from 0 (*Never*) to 6 (*More than 20 times*). For each item, participants responded to two questions: the first regarding the frequency of their own control use (self-report) and the second on the frequency of their partner's control use (partner-report). Only self-report scales were used in this study. The items were summed to produce an overall control score. In Frankland's (2011) study on a convenience sample, the reliability coefficient was .85 for self-report. In this study, reliability was .71.

For questionnaires measuring attitudes and behaviours in relationships (ECR, CTS2, Control scale) participants were instructed to think about the past 12 months of their last relationship prior to incarceration when responding. No time frame was attached to the Feelings about self and the TAS-20 scales as these measured general attributes.

Data collection procedures

Research was conducted according to procedures approved by a university ethics board and the Singapore Prison Service. Surveys were conducted in groups and women were informed that participation was confidential, voluntary, and had no implications on their sentences.

Results

During analyses, data from participants were removed due to excessive missing data and/or unusual responding, for instance answering all questions at the extremes or with the same value, or appearing to “fake good” on the CTS by not endorsing any items on the psychological aggression scales. Participants who had never been in a previous relationship were removed. No participants were excluded for reasons relating to English proficiency. From the total sample of 96 women, 21 women were removed and data from 75 women were used in final analyses.

To assess for violations of assumptions for statistical analyses, normality was examined. According to Kline (2005), skewness values > 3 and kurtosis values ≥ 10 are cause of concern. Skewness and kurtosis values for all variables were within these limits.

For both the control and CTS scale, although the responses formed an ordinal scale, the ordinal categories were converted into frequency midpoints to reflect the frequency of each behaviour. Behaviours that occurred once were recorded as 1; twice (recorded as 2); 3-5 times (recorded as 4); 6-10 times (recorded as 8); 11-20 times (recorded as 15) and more than 20 times (recorded as 25). The remaining two categories were treated as zero. This allowed for the measure of the relative frequency of each behaviour, and were combined to provide estimated frequency scores for each subscale.

It should be noted that *Avoidant Attachment* was not a variable in the RAC model, viewing. Moreover, although *control* was not a predetermined *abuse* variable, post-hoc

analyses utilized *control* as an alternate measure of abuse. The reasons for this are subsequently discussed.

Table 2 presents the mean, standard deviation, and minimum and maximum scores of variables in this study. Table 3 presents the correlations between all variables in the study. Correlations between variables across categories in the model were all less than .90 as recommended by Tabachnick and Fidell, (2001); indicating no problems with multicollinearity.

[Insert Table 2 about here]

In Johnson's (2006) research, he identified two clusters of high and low control with a Ward method of cluster analyses. Although cluster analyses is limited in produce groupings specific only to the present data, a K-means cluster was utilized because there was existing knowledge about the number of clusters that characterize the variable. Hence, following Johnson's example, a K-means cluster analyses with two clusters was performed on standardized scores for the Control scale. This study categorized high controlling and physically violent inmates as controlling perpetrators and low controlling and physically violent inmates as non-controlling perpetrators. Overall, 81.3% (N=61) of women reported ever perpetrating physical IPV in their lifetime. Amongst physically assaultive women, 22.8% (N=13) perpetrated controlling IPV.

First, the relationship between variables in the study and IPV perpetration were examined. The only significant positive correlation found was between shame and psychological IPV perpetration ($r(73) = .25, p < .05$). Post-hoc analyses found that anxious attachment was positively correlated to control ($r(73) = .31, p < .01$). No doubt, the exploration of this relationship was not specified a priori. However because research has consistently found strong links between control and IPV perpetration (Johnson & Ferraro 2000; Straus, 2008) and control was highly positively correlated to physical ($r(73) = .56, p <$

.01) and psychological ($r(73) = .48, p < .01$) IPV perpetration in this study; it was decided that further exploration of this link was warranted.

To examine the amount of variance that shame and anxious attachment explained in psychological IPV perpetration and control respectively, linear regressions were conducted. Shame significantly predicted psychological abuse scores, $b = .25, t(72) = 2.16, p = .03$. Shame also explained a significant proportion of variance in psychological abuse scores, $R^2 = .06, F(1, 72) = 4.67, p = .03$. Anxious attachment significantly predicted control scores, $b = .31, t(72) = 2.78, p < .01$. Anxious attachment also explained a significant proportion of variance in control scores, $R^2 = .10, F(1, 72) = 7.67, p < .01$.

Next, the correlations between variables in each path of the RAC model were analyzed. *Path 1, Rejection and threat to self:* Anxious attachment was positively correlated with shame ($r(73) = .59, p < .01$); *Path 2, Threats to self and defense against threat:* Shame was positively correlated to alexithymia ($r(73) = .53, p < .01$); *Path 3, Defense against threat and abuse:* Alexithymia was not significantly correlated to any abuse variables (physical or psychological IPV perpetration). This indicated that the pre-condition for an alexithymia-abuse path was not present for physical or psychological IPV perpetration. Hence no model fit analyses could be conducted.

Discussion

This study explored IPV perpetration from an attachment perspective on a sample of female Singaporean prisoners. First, the associations between a range of variables (including anxious and avoidant attachments, shame and alexithymia), and IPV perpetration were examined. Second, it was examined if the variables anxious attachment, shame, alexithymia and IPV perpetration linked together to form a circular rejection-abuse model of IPV perpetration. That is, the applicability of a RAC model of IPV - originally proposed by Brown et al. (2010) to explain male violence – to the present sample of female offenders was tested.

Unlike existing research showing links between the variables in this study to IPV perpetration- most of which came from male data - the only significant relationship found between variables and IPV perpetration in this study was between shame and psychological abuse as measured by the CTS2. This finding is nested within a pool of existing research reporting strong associations between shame and IPV perpetration (Dutton et al., 1995; Harmon, 2002; Harper, 2005). Contrary to the hypothesis that women with anxious attachments would be more prone to perpetrating IPV however, no associations were found between anxious attachment and women's IPV perpetration. This was surprising because research from both community and female batterer samples (e.g., Carney & Buttell, 2005; Henderson et al., 2005; Orcutt et al., 2005; Roberts & Noller, 1998) have reported links between anxious attachments and women's IPV perpetration. Furthermore, no associations between avoidant attachments and women's IPV perpetration were found either. Unlike anxious attachments however, this finding was consistent with some studies such as Roberts and Noller (1998) and Henderson et al. (2005) that also found no such associations. Instead, post-hoc analyses revealed that anxious attachment was significantly correlated to women's use of coercive control. It is important to note nonetheless that coercive control encompasses aspects of psychological aggression (Straus, 2008) and indeed coercive control and psychological aggression were highly correlated in this study. While these factors overlap, the primary difference between the control and the CTS2 psychological aggression scales is that the CTS2 measured overt behavioural threats, insults and shouting whereas the Control scale measured similar psychologically aggressive behaviours but in the context of coercive control (e.g., with the expectation of submission from a partner). Thus results suggest that the experience of shame was related to women inmates' use of insults, threats and shouting; whereas anxious attachments (that is, women who fear or become anxious at the threat of rejection) was related to women's use of similar tactics but in the context of coercive control.

To explain the results, it is postulated that when women in this study experienced shame that often results in a damage sense of self, they resorted to using verbal attacks and put-down their partners. Akin to Nathanson's (1992) theory, by inflicting the same shame onto a partner, women possibly regained a sense of control that helped repair their damaged sense of self and manage painful feelings. Women's psychological aggression therefore helped them manage distress by having the upper hand over the source of shame (Tangney, Wagner, Fletcher & Gramzow, 1992).

With regard to the anxious attachment and coercive control relationship however, it is postulated that when anxiously attached women feared potential rejection and/or abandonment by their partner, they resorted to using various means (including psychological tactics) to control different domains of their partners' lives. These methods consisted of covert (e.g., making financial decisions without talking to a partner) or more overt tactics (e.g., shaming a partner in front of others) as well as immediate (e.g., sending harassing texts) or on-going (e.g., limiting their time or making it difficult for them to see their family/friends) control tactics. Such control tactics possibly serve to give these women some sense of security that they have influence over their relationship, thereby reducing their vulnerability to loss. Whether or not this may be a false sense of security, it has been theorized to serve as a coping mechanism to manage distressing feelings relating to potential loss (Creasey, 2002) because imminent relationship distress and failure are thought to trigger intense feelings of ineffectual anger, fear, and confusion in anxiously attached individuals (Lyon-Ruth & Jacobvitz, 1999)

Thus it appeared that the shame and psychological aggression relationship reflected a more 'tit for tat' response – that is when women's own sense of self was under attack by a partner, they retaliated equally by trying to evoke the same sense of shame in their partner. The anxious attachment and coercive control relationship however reflected the use of covert and overt tactics by insecure women to foster a perceived sense of security over a relationship by exerting control over various domains in a partner's life. Both the correlations found

nevertheless reflected means of restoring a sense of control over a relationship and as a coping mechanism to regulate their own relationship distress.

In sum, although neither anxious nor avoidant attachments were associated with IPV perpetration per se; it was found that anxious attachments were linked to women's coercive control. For this reason, it may be important that perpetrator programs help women whose abuse are preceded by shame, learn to understand their triggers to shame and learn alternative and adaptive ways to manage shame. Indeed, verbally attacking their partners may ultimately lead to male partners to further retaliate, resulting in serious injury. While it is beyond the scope of this paper to provide in-depth descriptions of treatment recommendations, readers are referred to Brown (2004) and Wallace (2003) for more detailed directions in the treatment of shame and IPV. In addition, as control has been strongly tied to IPV perpetration (Johnson & Ferraro 2000; Straus, 2008), results suggest that it may be worthwhile exploring women's level of attachment anxiety during assessments of women referred for IPV treatment. Indeed, it may be useful for practitioners to incorporate an attachment-based understanding of why women feel the need to exert control within their relationships when feeling threatened by rejection or abandonment. This is especially important because women's use of control may put her in greater danger of victimization. In particular, if a woman is paired with an avoidantly attached partner who experiences control as especially aversive (Lawson & Brossart, 2009), this may result in a partner using extreme IPV to end her control. Nevertheless, the present study is one of the first to explore women's IPV in Singapore and the limitations of interpreting post-hoc findings are acknowledged. It is therefore recommended that further local research be conducted before firm conclusions or implications are drawn from results.

Testing the applicability of the rejection abuse model of IPV:

Contrary to expectation, the RAC was not applicable to psychological or physical IPV perpetration by women in this sample. No doubt, this study used an extreme criminal sample

where a large proportion (81.3%, N=61) of women reported ever perpetrating physical IPV in their lifetime and amongst physically assaultive women, a moderate percentage (22.8%, N=13) reported perpetrating coercive-controlling physical IPV. However, results suggested that compared to male batterers in Brown et al.'s (2010) study, women underwent a different pathway to perpetrating IPV. That is, compared to men in Brown et al.'s (2010) study, they perpetrated for different reasons and experienced different underlying risks. Results highlight that the need to further contextualize women's violence and reminds researchers than even though absolute values of women's violence and control appear high, their underlying reasons for perpetration may differ to men's. Perhaps, as researchers such as Swan and Snow (2002) suggested, women's violence need to be explored in the context of their male partners' abuse against them. This would allow researchers to determine who the primary perpetrator is, even in the context of female perpetrated controlling violence. Indeed, given that the RAC model was theorized to predict a pathway of violence by primary perpetrators, further research including such evaluations could shed light on why the current RAC model failed to apply to women in this sample. In addition, future research could consider cultural or patriarchal factors that influence how women's perpetration is viewed in Singaporean society. For instance, patriarchal attitudes have been associated with cultural beliefs that female perpetration is less serious (Marshall, 1992). Thus, women (and men) may be more accepting of women's perpetration. Otherwise, it could be that being a criminal sample, reasons such as being economically disadvantaged; having been desensitized to violence (Browne & Bassuk, 1997; Hotaling & Sugarman, 1990); mental health issues; exposure to conflicting parental relationships (Bowen 1978; Henning, Jones, & Holdfold, 2003; Mihalic & Elliott, 1997;) or self-defense (Hamberger & Potente, 1994; Johnson, 2006; Swan & Snow, 2002) may have been better able to account for IPV perpetration. As the present findings are preliminary and somewhat inconclusive, further research is needed to determine women's perpetration motives. Nevertheless, what remains clear is that despite women reporting a high rate of IPV

perpetration, including a portion who reported controlling violence; the underlying motives for doing so differed for women in this study and male batterers in Brown et al.'s (2010) study.

The second part of this study did not show support for the applicability of the RAC model to women's IPV perpetration. Thus, findings suggest that the motivational and risk factors as well as the pathway to IPV perpetration differed for women in this study to men in Brown et al.'s (2010) study. Hence, results suggest that different models of IPV may be needed to explain men and women's violence. In turn, this implies that interventions targeting female perpetrators ought to be tailored to women's needs and that adapting treatments from male intervention programs likely have limited effectiveness.

Limitations

The present research is limited in several ways. First, being a prison sample, reports were retrospective and likely impeded the accuracy in recalling IPV behaviors. Second, due to the infancy of both attachment and IPV research in Singapore, existing questionnaires developed from the West were used. Effort was made to reduce any cultural misconceptions (e.g., using IPV and control measures that assessed specific behaviours and avoided using any vague terms that could have different meanings across cultures); and although attachment norms can vary across culture, the underlying experiences of people – which was the core focus of this study – have been found to be unanimous across culture (van Ijzendoorn and Sagi, 1999). Nevertheless, scorings were all still based on comparisons to Western norms and it would be useful to validate and obtain local norms for these questionnaires, particularly in regards to attachment. Third, results and interpretations were drawn from post-hoc analyses of women's attachment and control use. Fourth, women's violence was not measured in the context of their male partner's violence against them. Fifth, a prospective power analysis was not conducted to determine the minimum sample needed and it is possible that a lack of power may have influenced the lack of significant findings in some of the analyses. Last,

results are limited to the present forensic sample and are not representative of the wider population. Thus results cannot be extrapolated to the broader Singapore community.

By taking the aforementioned limitations into account future studies may be enriched. In addition, future studies could include more detailed assessments of the context behind women's violence, including the historical pattern of IPV with her partner. Further, it will be useful for future studies to conduct a prospective power analysis to determine the minimum sample needed. Finally, in order to generalize results to the broader population, it would be beneficial to use a broader and larger sample from the community.

Conclusion

This is the first study to explore attachment and IPV in a female Singapore prison sample. Contrary to expectation, only one variable, shame, was related to psychological IPV perpetration. Post-hoc analyses found that although insecure attachments did not relate to IPV perpetration per se, anxious attachments were associated to women's use of coercive control. Hence it appeared that when women's sense of self was under attack by overwhelming shame, this was associated to their use of psychological abuse on their partners to evoke the same sense of shame in their partner. When anxiously attached women were vulnerable to rejection however this was associated with them exerting covert and overt control over various domains in a partner's life to foster a perceived sense of security over a relationship. Based on these findings, implications for practice were suggested. It was noted nonetheless that results were preliminary and that implications were limited by post-hoc analyses. Thus, further research is needed to determine firm conclusions. No evidence was found for a rejection-abuse pathway for women's IPV perpetration. Thus, results underscore that despite high rates of women's IPV perpetration, different motivations and risk factors underlie women and men's violence; and that it may be necessary to develop different interventions for male and female perpetrators. Overall, findings are preliminary and cannot be generalized beyond a focused sample of women inmates from Singapore.

References

- Babcock, J., C., Jacobson, N. S., Gottman, J., M., & Yerington, T., P. (2000). Attachment, emotional regulation, and the function of marital violence: Differences between secure, preoccupied, and dismissing violent and nonviolent husbands. *Journal of Family Violence, 15*(4), 391-409.
- Bagby, M., R., Parker, J., D. A., & Taylor, G., J. (1994). The twenty-item Toronto Alexithymia Scale-I. Item selection and cross-validation of the factor structure. *Journal of Psychosomatic Research, 38*(1), 23-32.
- Bartholomew, K., & Allison, C. J. (2006). An attachment perspective on abusive dynamics in intimate relationships. In M. Mikulincer & G. S. Goodman (Eds.), *Dynamics of romantic love: Attachment, caregiving, and sex*. New York: The Guilford Press.
- Black, M. C., Basile, K. C., Breiding, M. J., Smith, S. G., Walters, M. L., Merrick, M. T., . . . Stevens, M. R. (2011). *The National Intimate Partner and Sexual Violence Survey (NISVS): 2010 Summary Report*. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention.
- Bookwala, J., & Zdaniuk, B. (1998). Adult attachment styles and aggressive behavior within dating relationships. *Journal of Social and Personal Relationships, 15*, 175-190.
- Bowen, M. (1978). *Family therapy in clinical practice*. New York: Aronson.
- Bowlby, J. (1988). *A secure base: Parent-child attachment and healthy human development*. New York: Basic Books.
- Brennan, K., A., Clark, C., L., & Shaver, P., R. (1998). Self-report measurement of adult attachment: An integrative overview. In J. Simpson, A. & S. Rholes, W. (Eds.), *Attachment theory and close relationships*. New York: The Guilford Press A Division of Guilford Publications, Inc.

- Brown, J. (2004). Shame and domestic violence: treatment perspectives for perpetrators from self psychology and affect theory*. *Sexual and Relationship Therapy*, 19(1), 39-56.
doi: 10.1080/14681990410001640826
- Brown, J. (2012). Male perpetrators, the gender symmetry debate, and the rejection-abuse cycle: implications for treatment. *American journal of men's health*, 6(4), 331-343.
doi: 10.1177/1557988312439404
- Brown, J., James, K., & Taylor, A. (2010). Caught in the rejection-abuse cycle: are we really treating perpetrators of domestic abuse effectively? *Journal of Family Therapy*, 32(3), 280-307. doi: 10.1111/j.1467-6427.2010.00494.x
- Browne, A., & Bassuk, S. S. (1997). Intimate Violence in the Lives of Homeless and Poor Housed Women: Prevalence and Patterns in an Ethnically Diverse Sample. *American Journal of Orthopsychiatry*, 67(261-278).
- Brownridge, D. A. (2010). Does the situational couple violence- intimate terrorism typology explain cohabitators' high risk of intimate partner violence? *Journal of Interpersonal Violence*, 25(7), 1264-1283. doi: 10.1177/0886260509340544
- Carney, M. M., & Buttell, F. P. (2005). Exploring the relevance of attachment theory as a dependent variable in the treatment of women mandated into treatment for domestic violence offenses. *Journal of Offender Rehabilitation*, 41(4), 33-61. doi: 10.1300/J076v41n04_02
- Cassidy, J., & Shaver, P. R. (1999). *Handbook of attachment: Theory, research, and clinical applications*. New York: Guilford Press.
- Centers for Disease Control and Prevention. (2013). *Intimate partner violence: Definitions*. Retrieved from <http://www.cdc.gov/violenceprevention/intimatepartnerviolence/definitions.html>

- Creasey, G. (2002). Associations between working models of attachment and conflict management behavior in romantic couples. *Journal of Counseling Psychology*, 49(3), 365-375.
- Department of Statistics, Ministry of Trade and Industry, Republic of Singapore. (2010). *Census of population 2010: Advance census release*. Singapore: Author.
- Dozier, M., Stovall-McClough, K. C., & Albus, K. E. (2008). Attachment and psychopathology in adulthood. In J. Cassidy & P.R. Shaver (Ed), *Handbook of attachment: Theory, research, and clinical applications* (2nd ed.). (pp. 718-744). New York, NY, US: Guilford Press.
- Dutton, D., G., Saunders, K., Starzomski, A., & Bartholomew, K. (1994). Intimacy-anger and insecure attachment as precursors of abuse in intimate relationships. *Journal of Applied Social Psychology*, 24(15), 1367-1386.
- Dutton, D. G., van Ginkel, C., & Starzomski, A. (1995). The role of shame and guilt in the intergenerational transmission of abusiveness. *Violence and Victims*, 10(2), 121-131.
- Edwards, V. J., Holden, G. W., Felitti, V. J., & Anda, R. F. (2003). Relationship between multiple forms of childhood maltreatment and adult mental health in community respondents: results from the adverse childhood experiences study. *American Journal of Psychiatry*, 160, 1453 -1460.
- Evren, C., Sar, V., Evren, B., Semiz, U., Dalbudak, E., & Cakmak, D. (2008). Dissociation and alexithymia among men with alcoholism. *Psychiatry and Clinical Neurosciences*, 62(1), 40-47.
- Fiebert, M. M. (2010). References examining assaults by women on their spouses or male partner: an annotated bibliography. *Sexuality and Culture*, 14, 49-91.
- Frankland. A. (2011). *Domestic violence in same-sex relationships*. (Unpublished doctoral dissertation), Macquarie University, Sydney, Australia.

- Grabe, H. J., Rainermann, S., Spitzer, C., Gansicke, M., & Freyberger, H. J. (2000). The relationship between dimensions of alexithymia and dissociation. *Psychotherapy and Psychosomatics*, 69, 128-131.
- Graham-Kevan, N., & Archer, J. (2003). Intimate Terrorism and Common Couple Violence: A Test of Johnson's Predictions in Four British Samples. *Journal of Interpersonal Violence*, 18(11), 1247-1270. doi: 10.1177/0886260503256656
- Hamberger, L. K., & Potente, T. (1994). Counseling heterosexual women arrested for domestic violence: Implications for theory and practice. *Violence and Victims*, 9, 125-137.
- Hamel, J. (2012). *The partner abuse state of knowledge project: Findings at-a-glance*. Retrieved from <http://www.springerpub.com/content/journals/PA-KnowledgeBase-41410.pdf>
- Harmon, P. A. (2002). Why do men batter women? Assessing empathy, self-regard and narcissism levels, and attitudes toward women, men's roles and family of origin experiences among middle to upper class male batterers. *Dissertation Abstracts International. Section B: The Sciences and Engineering*, 62 (12-B), 6023.
- Harper, F. W. K. (2005). The role of shame, anger, and affect regulation in men's perpetration of psychological abuse in dating relationships. *Journal of Interpersonal Violence*, 20(12), 1648-1662. doi: <http://dx.doi.org.simsrad.net.ocs.mq.edu.au/10.1177/0886260505278717>
- Henderson, A. J. Z., Bartholomew, K., Trinke, S. J., & Kwong, M. J. (2005). When loving means hurting: An exploration of attachment and intimate abuse in a community sample. *Journal of Family Violence*, 20(4), 219-230. doi: 10.1007/s10896-005-5985-y
- Henning, K., Jones, A., & Holdford, R. (2003). Treatment needs of women arrested for domestic violence: A comparison with male offenders. *Journal of Interpersonal Violence*, 18(839-856).

- Holtzworth-Munroe, A., Stuart, G. L., & Hutchinson, G. (1997). Violent versus nonviolent husbands: Differences in attachment patterns, dependency and jealousy. *Journal of Family Psychology, 11*(3), 314-331.
- Hotaling, G. T., & Sugarman, D. B. (1990). Prevention of wife assault. In R. T. Ammerman & M. Hersen (Eds.), *Treatment of family violence: A sourcebook* (pp. 3-14). New York: Plenum.
- Hughes, F. M., Stuart, G. L., Gordon, K. C., & Moore, T. M. (2007). Predicting the use of aggressive conflict tactics in a sample of women arrested for domestic violence. *Journal of Social and Personal Relationships, 24*, 155–176. doi: 10.1177/0265407507075406
- Johnson, M. P. (2006). Conflict and control: gender symmetry and asymmetry in domestic violence. [Review]. *Violence against women, 12*(11), 1003-1018. doi: 10.1177/1077801206293328
- Johnson, M. P., & Ferraro, K. J. (2000). Research on domestic violence in the 1990s: Making distinctions. *Journal of Marriage and the Family, 62*, 948-963.
- Keltikangas-Jarvinen, L. (1982). Alexithymia in violent offenders. *Journal of Personality Assessment, 46*(462–467).
- Kline, R. B. (2005). *Principles and practice of structural equation modeling*. New York: The Guilford press.
- Langhinrichsen-Rohling, J., Selwyn, C., & Rohling, M. L. (2012). Rates of Bidirectional Versus Unidirectional Intimate Partner Violence Across Samples, Sexual Orientations, and Race/Ethnicities: A Comprehensive Review. *Partner Abuse, 3*(2), 199-230. doi: 10.1891/1946-6560.3.2.199
- Laroche, D. (2005). *Aspects of the Context and Consequences of Domestic Violence - Situational Couple Violence and Intimate Terrorism in Canada in 1999*. Quebec: Government of Quebec: Institut de la statistique du Québec.

- Lawson, D. M., & Brossart, D. F. (2009). Attachment, interpersonal problems, and treatment outcome in group therapy for intimate partner violence. *Psychology of Men and Masculinity, 10*(4), 288-301. doi: 10.1037/a0017043
- Lawson, D. M., Weber, D., Beckner, H. M., Robinson, L., Marsh, N., & Cool, A. (2003). Men who use violence: Intimate violence versus non-intimate violence profiles. *Violence and Victims, 18*, 259-277.
- Lyons-Ruth, K., & Jacobvitz, D. (1999). Attachment disorganization: Unresolved loss, relational violence, and lapses in behavioral and attentional strategies. In J. Cassidy & P. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (pp. 520–554). New York: Guilford Press.
- Marshall, L. L. (1992). The severity of violence against men scales. *Journal of Family Violence, 7*, 189-203.
- Mauricio, A. M., Tein, J., & Lopez, F. G. (2007). Borderline and antisocial personality scores as mediators between attachment and intimate partner Violence. *Violence and Victims, 22*(2), 139-157.
- Mayseless, O. (1991). Adult attachment patterns and courtship violence. *Family Relations, 40*(1), 21-28.
- McIlwain, D., & Warburton, W. (2005). *The feelings about self scale: measuring internalised shame*. (Unpublished Manuscript). Macquarie University, Sydney, Australia.
- Mihalic, S. W., & Elliott, D. (1997). A social learning theory model of marital violence. *Journal of Family Violence, 12*, 21–47.
- Mikulincer, M., Florian, M., Cowen, P. A., & Cowen, C. P. (2002). Attachment security in couple relationships: A systematic model and its implications for family dynamics. *Family Process, 41*(3), 405-434.
- Nathanson, D. L. (1992). *Shame and Pride: Affect, Sex, and the Birth of the Self*. New York: W.W. Norton.

- Nemiah, J. C., Freyberger, H., & Sifneos, P. E. (1976). Alexithymia: A view of the psychosomatic process. In O. Hill (Ed.), *Modern trends in psychosomatic medicine* (pp. 430-439). London & Boston: Butterworth.
- O'Hearn, R., & Davis, K. E. (1997). Women's experience of giving and receiving emotional abuse. *Journal of Interpersonal Violence, 12*, 375-391.
- Orcutt, H. K., Garcia, M., & Pickett, S. M. (2005). Female-perpetrated intimate partner violence and romantic attachment style in a college student sample. *Violence and Victims, 20*(3), 287-302.
- Pence, E., & Paymar, M. (1986). *Power and control: Tactics of men who batter*. Duluth MN: Minnesota Program Development, Inc.
- Rathus, J. H., & O'Leary, D. (1997). Spouse-specific dependency scale: scale development. *Journal of Family Abuse, 12*, 159-168.
- Roberts, N., & Noller, P. (1998). The Associations between Adult Attachment and Couple Violence: The Role of Communication Patterns and Relationship Satisfaction. In J.A. Simpson & W.S. Rholes (Eds.), *Attachment Theory and Close Relationships*. pp. 317-352. New York: Guilford Press.
- Ross, J. M. (2011). Personality and situational correlates of self-reported reasons for intimate partner violence among women versus men referred for batterers' intervention. [Research Support, Non-U.S. Gov't]. *Behavioral sciences & the law, 29*(5), 711-727. doi: 10.1002/bsl.1004
- Shepard, M. F., & Campbell, J. A. (1992). The abusive behavior inventory. *Journal of Interpersonal Violence, 7*, 291-305.
- Sonkin, D. J., & Dutton, D. (2003). Treating assaultive men from an attachment perspective. *Journal of Aggression, Maltreatment & Trauma, 7*(1-2), 105-133. doi: 10.1300/J146v07n01_06

- Stosny, S. (1995). *Treating attachment abuse: A compassionate approach*. New York: Springer Publishing Company.
- Straus, M. A. (2008). Dominance and symmetry in partner violence by male and female university students in 32 nations. *Children and Youth Services Review*, 30(3), 252-275. doi: 10.1016/j.chidyouth.2007.10.004
- Straus, M. A. (2011). Gender symmetry and mutuality in perpetration of clinical-level partner violence: Empirical evidence and implications for prevention and treatment. *Aggression and Violent Behavior*, 16(4), 279-288. doi: 10.1016/j.avb.2011.04.010
- Straus, M. A., Hamby, S. L., Boney-McCoy, S., & Sugarman, D. B. (1996). The Revised Conflict Tactics Scales (CTS2): Development and Preliminary Psychometric Data. *Journal of Family Issues* 17(3), 283–316.
- Swan, S. C., & Snow, D. L. (2002). A Typology of Women's Use of Violence in Intimate Relationships. *Violence against women*, 8(3), 286-319. doi: 10.1177/107780120200800302
- Tabachnik, B. G., & Fidell, L. S. (2001). *Using multivariate statistics (4th ed.)*. Needham Heights, MA: Allyn & Bacon.
- Tangney, J. P., Wagner, P., Fletcher, C., & Gramzow, R. (1992). Shamed into anger? The relation of shame and guilt to anger and self-reported aggression. *Journal of Personality and Social Psychology*, 62(4), 669-675.
- Tutkun, H., Savas, H. A., Zoroglu, S. S., Esgü, K., Herken, H., & Tiryaki, N. (2004). Relationship between alexithymia, dissociation and anxiety in psychiatric outpatients from Turkey. *Israel Journal of Psychiatry and Related Sciences* 41(2), 118-124.
- van IJzendoorn, M. H., & Sagi, A. (1999). Cross-cultural patterns of attachment: Universal and contextual dimensions. In J. Cassidy & P. Shaver (Eds.), *Handbook of attachment*. New York: Guilford.

- Wallace, R., & Nosko, A. (2003). Shame in male spouse abusers and Its treatment in group therapy. *Journal of Aggression, Maltreatment & Trauma*, 7(1-2), 47-74. doi: 10.1300/J146v07n01_04
- Walsh, Z., Swogger, M. T., O'Connor, B. P., Schonbrun, Y. C., Shea, T. M., & Stuart, G. L. (2010). Subtypes of partner violence perpetrators among male and female psychiatric patients. *Journal of Abnormal*, 119(563–574). doi: 10.1037/a0019858
- Yelsma, P. (1996). Affective Orientations of Perpetrators, Victims, and Functional Spouses. *Journal of Interpersonal Violence*, 11(2), 141-161. doi: 10.1177/088626096011002001

Tables and Figures

Table 1

Demographic information

Characteristic	Women
Ethnicity	
Malay	49%, N= 39
Chinese	35%, N=28
Indian	5%, N=4
Others	11%, N=8
Sentencing	
Average length of incarceration (years)	2
Average full sentence (years)	6
Relationship Status	
Involvement in a relationship at the time of study	69%, N=52
Average relationship length (years)	6.25
Average number of previous relationships	3
Average length of previous relationships (years)	7
Offences	
Drug related	70.6%, N=53
Theft/robbery	5.4%, N=4
Other offences (including violent and non-violent)	24%, N=18
Involvement in violent crime	
Total involved in violent crime	21.5%, N=17
Toward a stranger	31.25%, N=5
Toward a known person/family member	37.50%, N=6
Toward an intimate partner	31.25%, N=5
Toward a child	0%
Personal protection order (PPO)	
Percentage yes	5.1%, N=4
Duration of PPO (months)	6

Note. The total N varies for each characteristic due to missing data

Table 2

Sample size, means, standard deviations, minimum and maximum scores for all variables

		N	Mean	Standard Deviation	Minimum	Maximum
Abuse	Physical Assault	75	25.96	43.52	0.00	177.00
	Psychological Aggression	75	31.77	41.01	0.00	200.00
	Control	75	20.67	16.79	0.00	84.00
Rejection	Avoidant Attachment	75	2.85	0.95	1.00	5.06
	Anxious Attachment	75	4.25	1.02	1.89	6.17
Threat to self Defence against threat	Shame Alexithymia Total scale	75	68.40 54.11	14.22 12.15	37.00 31.00	100.00 82.00

Table 3

Inter-correlations of variables in the study

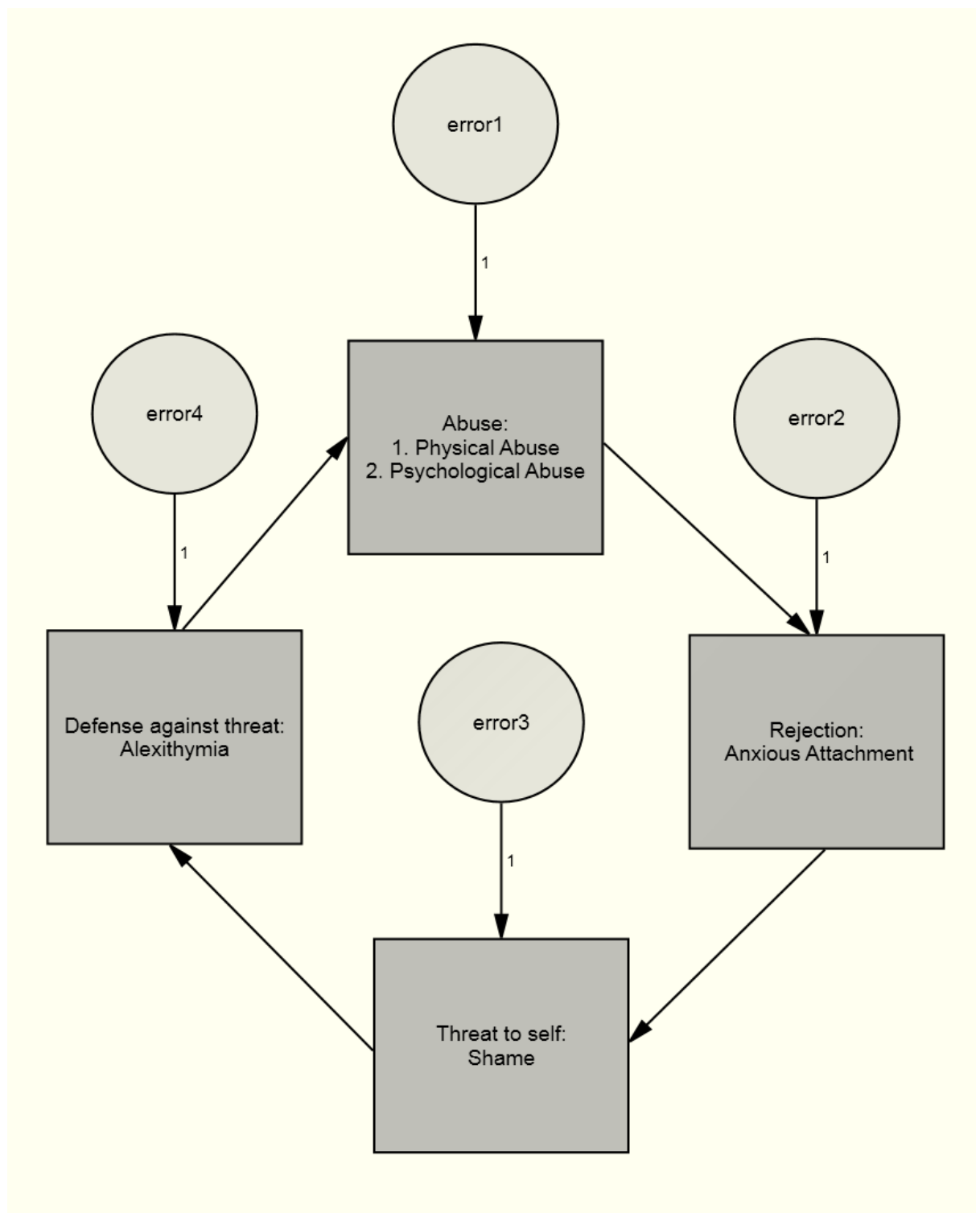
		1	2	3	4	5	6	7
Abuse	1 Physical Assault	-						
	2 Psychological Aggression	.69**	-					
	3 Control	.56**	.48**	-				
Rejection	4 Avoidant Attachment	-0.01	0.12	0.15	-			
	5 Anxious Attachment	0.19	0.19	.31**	.34**	-		
Threat to self Defence against threat	6 Shame	0.21	.25*	0.19	.45**	.59**	-	
	7 Alexithymia	0.11	0.17	0.15	.38**	.41**	.53**	-

Note. ***Correlation is significant at the .001 level (2-tailed)

**Correlation is significant at the .01 level (2-tailed)

*Correlation is significant at the .05 level (2-tailed)

Figure 1

The rejection abuse cycle model

CHAPTER 5.
OVERALL CONCLUSION

5.1 Overview

Intimate partner violence (IPV) is a lingering problem that devastates societies worldwide. Despite its borderless impact, IPV research has been concentrated in the West (Kimmel, 2002) and only a handful of studies focusing on IPV are found from within Asia. Particularly, in Singapore, a South-east Asian nation made up of Chinese, Malays, Indians, and a minority of other ethnicities, only approximately five IPV related empirical studies were found at the time of writing. Of the few that reported prevalence rates, only samples from community (Cheong & Bong, 2010), student (Straus, 2004) and a small number of victims from an emergency department were reflected (Foo & Seow, 2005a; Foo & Seow, 2005b; Seow & Foo, 2006). No studies from institutionalized or perpetrator group samples were found. Moreover, most research focused on women's victimisation and only two explored men's victimisation. Due to the paucity of research, Singapore adapts IPV knowledge and interventions from the United States (U.S), the current leaders in IPV research. No doubt, given few alternatives, this may be necessary. However this is far from ideal given the vastly different social and cultural contexts between the two countries. Also concerning, is that within the U.S. itself, the current dominant intervention - the *Duluth* model (Pence & Paymar, 1986) is being challenged by scholars due to compelling evidence of its limited effectiveness (Babcock, Green & Robie, 2004). The *Duluth* model is based on the traditional feminist view of IPV as a male-only perpetrated phenomenon that occurs as a result of patriarchal values condoned by society (Pence & Paymar, 1993). While power and control issues stemming from patriarchy play an important role in men's IPV perpetration - particularly in traditionally more patriarchal societies as Singapore - compelling evidence of female perpetrated IPV has emerged over the last decades. These findings led to a conglomeration of 'family violence' researchers who challenged the traditional feminist view of IPV. Family violence researchers believe that IPV can be reciprocal and that both sexes are responsible for perpetration (Straus, 2011). They also stress individual and relational factors, comparable across sexes to play an

important role in IPV perpetration (Ross, 2011). While researchers from both the feminist and family violence camps continue to debate the origins of IPV, one fact remains incontestable, that multiple risk factors underlie IPV (Centers for Disease Control and Prevention, 2012) beyond reasons of patriarchy. For this reason, there is a need to consider integrating other IPV risk factors into intervention. In particular, there is a need to consider intervention models that apply to female perpetration as treatment for women are currently being adapted from existing male intervention programs (Kernsmith, 2005). Undoubtedly, adjusting a program originally born from patriarchal ideologies to treat female perpetration is in itself flawed. Taken together, two major gaps in research have been highlighted. First, there is a need for IPV research to be conducted in Singapore, where at this point in time, any study may contribute to a better understanding of the local dynamics of IPV. Next, with several shortfalls in the current patriarchal conceptualization and treatment of IPV, there is a need to expand upon and offer additional models of IPV that could consequentially provide a more comprehensive understanding and hence improve intervention approaches to IPV.

In light of the above, the present research attempted to address these shortfalls in several ways. First, to expand the local knowledge of IPV in Singapore, Study 1 examined the prevalence and frequency rates; as well as the types of IPV perpetration in a male and female prison sample. Specifically, Johnson's (2006) method of identifying IPV 'typologies' was used to identify and measure five types of IPV: Three coercive controlling IPV typologies: *Intimate Terrorism (IT)* – violence perpetrated with the intent of controlling a partner who is either non-violent or who uses non-controlling violence, *Violent Resistance (VR)* – violence perpetrated in retaliation/self-defence to IT, and *Mutual Violent Control (MVC)*– violence perpetrated by both partners with the intention of controlling each other; and two non-coercive controlling IPV typologies: *Situational Couple Violence (SCV)*– violence without using control that is one-sided (*SCV Self-only [SCVS]*) or reciprocal (*SCV-Mutual [SCVM]*) and likely results from an escalation of situational conflict between the couple. Study 1 used

Johnson's (2006) typologies to decipher IPV because it is currently one of the most influential conceptualizations in the research field that will allow for straightforward cross-study comparisons to be made. In addition, to expand the existing patriarchal conceptualization of IPV to include other theories, Study 2 and Study 3 examined IPV from an attachment framework on the same sample of inmates used in Study 1. Study 2 and 3 were identical except that Study 2 examined male and Study 3 examined female inmates. In Study 2 and 3: Part 1 explored the association between a range of variables including shame, alexithymia and insecure (avoidant and anxious) attachments, and IPV perpetration; Part 2 tested if the variables of anxious attachment, shame, alexithymia and IPV perpetration linked together to form a circular path of rejection-abuse. That is, the applicability of an attachment-based rejection-abuse cycle (RAC) model of IPV perpetration was tested on the present sample. The RAC model tested was originally proposed by Brown, James and Taylor (2010) and successfully validated on a community pilot sample of 66 men attending a batterer's intervention program in Australia. In particular, an attachment framework was chosen because 1) it provided a framework of understanding the development of IPV and its associated risk factors in the context of a relationship (Bowlby, 1969, 1980; Fonagy, 2004); 2) it explored the subjective experiences of the individual (Bowlby, 1969, 1980; Fonagy, 2004) that is not specific to gender; and 3) the fundamental processes underlying attachment are believed to be unanimous across cultures (Cassidy & Shaver, 1999; van Ijzendoorn & Sagi, 1999). This is the first study in Singapore to explore types of IPV perpetrated and to test a model of IPV. In addition, further to being the only study to examine an incarcerated population, a prison sample was chosen because forensic institutions are known to house the highest concentration of perpetrators with borderline personalities (Mauricio & Tein, 2007); traits believed to be born out of early attachment dysfunctions (Dozier, Stovall-McClough, & Albus, 2008). Thus it was expected that an attachment-based model of IPV would be particularly relevant to a prison sample.

This chapter first describes the methods used to collect data that was uniform across the three studies. Next, key findings from each study are summarised. This is followed by an overview of the theoretical and practical implications of results. Finally the limitations of the current study together with recommendations for future research are discussed before the information is tied together in a conclusion.

Approximately 200 male and female inmates who were incarcerated for any offence excluding murder and sexual offences were randomly chosen to participate in this study. Participation was voluntary and inmates completed a battery of questionnaires that examined IPV, insecure attachments, and the different variables within the RAC model. These included scales measuring attachment, shame and alexithymia. A control scale (Frankland, 2011) and the *Revised Conflict Tactics Scale (CTS2)* (Straus, Hamby, Boney-McCoy, & Sugarman 1996) were also used to measure IPV types. The CTS2 is the most widely used scale in IPV research (Desmarais Reeves, Nicholls, Telford, & Fiebert, 2012) and was chosen to allow for easy cross-study comparisons to be made. Following data cleaning, data from 75 men and 75 women were used in final analyses.

5.2 Empirical findings

To begin, Study 1 examined the prevalence (whether or not IPV was perpetrated in the past year of their last relationship before incarceration) and frequency (how often IPV was perpetrated over the past year of inmates' last relationship before incarceration) rates of IPV. Both men and women reported perpetrating minor and severe IPV, with overall more minor than severe IPV perpetrated when averaged across sex. Averaged across violence severity, more women (64.0%) than men (46.7%) reported ever perpetrating physical IPV. Women also reported perpetrating statistically significantly more frequent physical IPV than men. When victimisation reports were measured however, statistically significantly more women (63.0%) than men (41.3%) also reported ever being physically victimised. Furthermore, women reported being victimised by male partners more frequently than men reported being

victimised by female partners. Notably however, closer analyses revealed that men's self-reported physical IPV perpetration had poor reliability. As such, all results relating to men's self-reported physical IPV perpetration in this study need cautious interpretation. Piecing the information together, women reported higher physical IPV perpetration than men. At the same time, women also reported more victimisation than men.

Regardless of perpetration rates, when the types of IPV perpetrated were deciphered, it was found that a similar proportion of men and women perpetrated non-controlling and controlling types of IPV. Moreover, this pattern of distribution was the same whether inmates' perpetration or victimisation reports were used to determine typologies. To determine IPV types, only inmates who perpetrated physical assaults at least once in their lifetime were included. They were separated according to whether or not they used coercive control and whether IPV and control used was one-sided or reciprocal. During analyses, it was noted that seven cases could not be categorized because Johnson's (2006) typologies did not account for dynamics in which one partner was non-violent but controlling. Hence these cases were left out. Otherwise, it was found that majority of men and women perpetrated non-coercive controlling SCVM (55% and 62%) and SCVS (19% and 10%); followed MVC (17% and 15%), IT (6% and 7%) and VR (2% and 7%). Notably, because inmates' prevalence scores of IPV perpetration over their lifetime were used for these analyses, there were no problems with reliability for either men or women. Hence, findings were expected to be fair representations of the types of IPV perpetrated by men and women in the sample. Therefore, despite women reporting higher rates of IPV perpetration than men, when types of IPV perpetrated were measured (independent of frequency rates), men and women were found to perpetrate a roughly equivalent proportion of each IPV type.

Notably, limitations of the study need to be kept in mind when interpreting results. First, men's reports of their physical IPV perpetration had poor reliability suggesting that results may not be an accurate reflection of men's true perpetration rates. Second, although

men and women matched on most demographic measures and were equally involved in violent crime; gender differences were found in the length of and reasons for incarceration in this sample. Thus, direct gender comparisons from this study need cautious interpretation and no conclusions regarding gender are reserved at this in research, as they would be premature.

In Study 2 and 3 respectively, Part 1 explored the variables of shame, alexithymia and insecure (anxious and avoidant) attachments in relation to men and women's IPV perpetration. Based on existing research linking shame (Dutton, van Ginkel, & Starzomski, 1995; Harmon, 2002; Harper, 2005) and alexithymia (Nemiah, Freyberger & Sifneos, 1976) to IPV, we expected these variables to be positively correlated to men and women's IPV perpetration. Furthermore, based on consistent research findings linking anxious attachments to IPV (Babcock, Jacobson, Gottman, & Yerington, 2000; Carney & Buttell 2005; Dutton, Saunders, Starzomski, & Bartholomew, 1994; Henderson, Bartholomew, Trinke, & Kwong, 2005; Holtzworth-Munroe, Stuart, & Hutchinson, 1997; Orcutt, Garcia, & Pickett, 2005; Roberts & Noller, 1998; Sonkin & Dutton 2003), it was hypothesized that men and women with anxious attachments would be prone to perpetrating IPV. However, given the lack of clarity from current research regarding avoidant attachments and IPV perpetration, the relationship between avoidant attachments and IPV perpetration was exploratory.

Part 2 of Study 2 and 3 tested to see if the variables of anxious attachment, shame, alexithymia, and IPV perpetration linked together to form a circular rejection-abuse path that explained IPV perpetration by male and female inmates respectively. That is, the applicability of a RAC model of IPV (Brown et al., 2010) to the present sample was examined. Brown et al., (2010) theorised that individuals who are anxiously attached to their partners are vulnerable to rejection. These individuals believe that their intimates, like their early caregivers, would hurt and abandon them. When real or perceived rejection is experienced, this triggers memories of past rejection trauma and they become overwhelmed with feelings of shame. To vulnerable individuals, the experience of shame is equivalent to the depletion of

the self; and they resort to using alexithymia to cut-off from emotions and defend against the threat of destruction to their sense of self. Alexithymia has been linked to dissociation (Evren, Sar, Evren, Semiz, Dalbudak, & Cakmak, 2008), a strategy associated with managing trauma-related memories and painful emotions (Tutkun, Savas, Zoroglu, Esgi, Herken, & Tiriyaki, 2004; Grabe, Rainermann, Spitzer, Gansicke, & Freyberger, 2000). Both dissociation and alexithymia involve the denial and hence reduction of the subjective experience of painful emotions. Thus theoretically, alexithymia reduces impulses toward IPV perpetration. Denial however only temporarily blocks emotional pain. In the long run, it often fails as a coping strategy. Particularly during emotionally charged inter-partner conflicts. Furthermore, because alexithymia minimizes feelings, it desensitizes an individual from their feelings and arguably increases the likelihood of abuse. In these instances, attacking the source of shame becomes essential to psychological survival. In perpetrating IPV, this serves to “control” distress by “controlling” the source of shame and reducing the possibility of immediate abandonment by intimidating a partner into staying. In the long run however, aggression likely encourages further rejection and eventual abandonment, thereby maintaining the RAC of IPV.

To test the model, it was hypothesized that for both men and women, vulnerability to *rejection* (measured by anxious attachment) would lead to experiencing a *threat to self* (measured by shame) that would lead to *defending against threat* (measured by alexithymia) that would lead to *abuse* (measured by psychological and physical IPV) that would ultimately lead to further *rejection*. This study tested out the model on both psychological and physical IPV perpetration. Furthermore, because Brown et al. (2010) suggested that their model was appropriate for some but not all perpetrators and this research aimed to explore whether perpetrators who were more controlling were more likely to fit the model. Findings are first presented from Study 2 followed by Study 3.

For men, avoidant attachment was the only variable correlated to physical IPV perpetration. None of the variables within the RAC model were associated to physical IPV

perpetration. Thus the RAC model was not tested on men's physical IPV perpetration. As such, another aim of this study that was to test the model's applicability to controlling versus non-controlling physical IPV perpetration could not be tested. As stated earlier however, results must be interpreted with caution due to the poor reliability of men's self-reported physical assault perpetration.

Conversely, avoidant attachment was the only variable not correlated to psychological IPV perpetration whereas all the variables in the RAC model (shame, alexithymia and anxious attachment) were correlated to psychological IPV perpetration. Thus, the pre-conditions to test the RAC on psychological IPV were present. Inadvertently, post-hoc analyses found that like psychological IPV perpetration, control was correlated to all the variables in the RAC model but not to avoidant attachment. Furthermore, control was highly correlated to psychological IPV, suggesting that a similar construct was being measured. For these reasons, control was used as a post-hoc alternative measure of psychological abuse in model fit analyses for men. For clarity, psychological IPV measured by the CTS2 and control will hereafter be referred to as 'psychological aggression' and 'control' respectively. When psychological aggression was used as the measure of IPV, the RAC model did not fit well. Post-hoc analyses however revealed that adding another variable, particularly between the abuse-rejection pathway (the only pathway in the model that was not significant) would significantly improve model fit. When control was used as the measure of abuse, partial support for the RAC model was found. Specifically, a linear rejection-abuse pathway starting from anxious attachment that led to shame that led to alexithymia and ended in control was found to fit well with the present sample of men. Higher levels of control however was not associated with higher levels of rejection, thus a circular model of rejection-abuse was not supported.

For women, contrary to expectations, the only association found among variables tested and IPV was a positive correlation between shame and psychological IPV perpetration.

As such, the pre-existing correlations between model variables and women's IPV perpetration needed to run model fit analyses were not present. Thus, the RAC model was deemed inapplicable to women's IPV perpetration. Interestingly, post-hoc analyses revealed that while insecure attachments had no associations to IPV perpetration per se, anxious attachment was positively correlated to women's use of coercive control. As control has been strongly associated to IPV perpetration (Johnson & Ferraro 2000; Straus, 2008) and indeed was highly correlated to both psychological and physical IPV in this study, it was decided that further exploration of this relationship was worthwhile.

Pulling results together, it appeared that for men, anxious attachment was associated with psychological aggression and control, whereas avoidant attachment was associated with physical abuse. In line with these findings, variables within the RAC model were associated with psychological aggression and control but not physical abuse. Nonetheless, partial support for the RAC model, -that is a linear rejection-abuse pathway- was only found to explain men's use of control that include the use of psychological tactics to exert control. However, the RAC model did not explain psychological aggression that was not perpetrated in the context of exerting control. For women, the only associations among variables found were between shame and psychological abuse; and anxious attachment and control. Thus, the RAC model could not be tested on women's IPV perpetration. Notably, findings relating to control for both men and women were post-hoc and limitations need to be acknowledged.

5.3 Implications of findings

5.3.1 Implications of findings from Study 1

First, scanning the overall prevalence rates for IPV, the pattern of higher female than male self-reported IPV perpetration rates were consistent to a myriad of Western research studies and meta-analytical reviews demonstrating gender comparable perpetration rates and particularly, slightly higher female than male reported rates of perpetration (e.g., Archer, 2000; Desmarais et al., 2012). Further, these findings cut across both community and clinical samples (Langhinrichsen-Rohling, Selwyn, & Rohling, 2012). Taking the absolute value of results, it appeared that women reported both higher rates of perpetration and victimisation. Thus it could be that in this extreme sample of male and female inmates, that women's violence perpetration (and hence victimisation as a result of her partner's retaliation) rates exceed men or perhaps that women in this sample experienced overall higher rates of IPV in their relationships than men.

It is important to note however, that questions were raised regarding the accuracy of men's self-reported perpetration rates due to poor reliability scores; suggesting that women were more truthful in disclosing physical IPV perpetration than men. Indeed, in a large-scale literature review, Margolin (1987) concluded that men were less likely than women to disclose their own perpetration. Particularly, in Singapore where "face" is a treasured value (Seow & Foo, 2006), "face" has been reported to especially influence Chinese men (who made up the largest proportion in this sample) to feel the need to present themselves desirably (Li, 1999). Supporting this theory, when inmates' reports of their partner's violence were measured, an opposite pattern of higher female than male physical IPV victimisation was found. Due to good reliability of victimisation reports, it could be that higher female than male victimisation rates reflect a more accurate picture of IPV in this sample. However, because reports from inmates' partners could not be obtained and corroborated, the conflicting pattern of perpetration and victimisation together with the poor reliability of men's

self-reports renders it difficult for firm conclusions to be made. In addition, although men and women matched on most demographic measures and were equally involved in violent crime, some differences existed. Specifically, women had longer sentences and more drug related offences; and amongst inmates charged for violent offences, women primarily targeted their violence at family members whereas men targeted their violence more towards strangers. Based on these differences, it may therefore be premature to draw conclusions regarding gender based on this sample. Thus, till further research is conducted, definite conclusions are reserved.

The latter part of Study 1 broke down the types of IPV men and women perpetrated; and several deductions were drawn from results. First, although SCV is typically portrayed as the type of violence found in general population samples (Johnson, 2006), SCV was found to be the most common type of IPV perpetrated by both male and female inmates (men: 74%, N=35; women: 72%, N=44). This suggests that SCV may also be a widespread issue amongst high-risk forensic populations. Thus, although SCV may be overlooked due to its reputation of being less severe and more ‘commonplace’, it should be emphasized that it too has the potential to escalate and harm (Kelly & Johnson, 2008). Particularly, coupled with the myriad of risk factors present in a criminal population, consequences of perpetration could be dire. As such, it may be necessary for therapeutic programs within institutions to target SCV - the most pervasive type of IPV - in an effort to prevent future escalation. Second, feminists argue that women aggress primarily out of self-defence. Therefore, mostly women and not men perpetrate VR. While a few more women (7%, N=4) compared to only one man (2%) reported perpetrating VR in self-defence to coercive controlling violence, the proportion of the present sample who reported VR was so low overall that meaningful conclusions could not be drawn. It is possible that so few cases of VR were found because such perpetrators are unlikely to be incarcerated. Nevertheless, results did not appear to support the feminist view that women only perpetrated in self-defence because women’s perpetration of other coercive

controlling types of IPV exceeded (e.g., MVC) or equaled (e.g., IT) VR perpetration. Results however cannot be interpreted at face value. Particularly, although a roughly equal rate of men (16%, N=8) and (15%, N=9) women perpetrated MVC, it must not be assumed that men and women in this sample perpetrated equally violent and controlling IPV within the MVC dynamic. Indeed, it is possible that control and violence remained asymmetrical within MVC and that a primary perpetrator existed. Thus, the number of women (and men) who perpetrated in self-defence may be higher than what was immediately apparent from results. Nevertheless this can only be determined with further contextualization of IPV in future studies. Last, feminists consider IT a predominantly male phenomenon. Yet, contrary to shelter and court studies that find majority of IT to be male-perpetrated (e.g., Graham-Kevan & Archer, 2003; Johnson, 2006), this study found that albeit only a very small percentage overall, approximately the same or perhaps slightly more women than men perpetrated IT (7%, N=4 women and 6%, N=3 men). These results lined up with data from Western community samples (e.g., Brownridge, 2010; Larouche, 2005) and a Western prison sample (Graham-Kevan & Archer, 2003) that found slightly more women than men perpetrated IT. Overall, men and women in this study both reported controlling and non-controlling types of IPV perpetration. However, without further contextualization of mutually controlling IPV perpetration, it remains unclear if a primary perpetration existed within that dynamic and what proportion of them are men or women.

In this study, overall rates of coercive controlling IPV seemed low for a forensic sample and concerns were raised regarding the willingness of respondents, particularly men, to expose physical IPV. Furthermore, because clustering is specific to the present data set's structure, it may not accurately be compared with other studies. That is, participants found to exert low levels of control (i.e., the non-controlling group) were only so relative to the others in this sample. Due to this being a criminal sample, it is possible that what is considered non-controlling in this study may not be so when compared to a normative sample. As such, it is

possible that when compared to the wider population, the percentage of men and women in each IPV typology may differ. That is, with more men and women being considered to be controlling. Nevertheless, lending support to the legitimacy of the current findings, another prison study by Grahan-Kevan and Archer (2003) on 239 inmates reflected a strikingly similar pattern or results. Specifically, Grahan-Kevan and Archer (2003) found that majority of men (79.3%, N=42) and women (80.8%, N=42) perpetrated SCV; slightly more women (9.4%, N=5) than men (3.8%, N=2) perpetrated IT; a similar proportion of men 9.6% (N=5) and women 9.4% (N=5) perpetrated MVC; and a small and comparable proportion of men (5.8%, N=3) and women (1.9%, N=2) perpetrated VR. Thus based on the similarity of these results, it is possible that when an extreme sample of men and women are examined, or when demographically similar samples are examined; both men and women are tend to perpetrate coercively controlling IPV. Generally, results suggest that both women and men in this sample perpetrated controlling IPV and more often than not, controlling violence was reciprocated rather than being one-sided or retaliated with non-controlling violence. It is emphasized however that further contextualization of MVC types of IPV is needed to determine the existence of a primary abuser within that dynamic before women and men are inaccurately considered 'equal' perpetrators. Furthermore because of existing differences between the present sample of men and women already mentioned, conclusions regarding gender need cautious interpretation. Nevertheless, results indicate perpetration by both genders and does not support the feminist assertion that IPV is almost entirely motivated from patriarchal ideologies. Instead it draws attention to the need to explore motivations of IPV beyond patriarchy that apply to both sexes. For this reason, the next section discusses implications drawn from this study's exploration of IPV from an attachment framework.

5.3.2 Implications of findings from Study 2 and 3

The following discussion first explores findings for men followed by that for women. For better clarity, the theoretical implications of findings are first discussed followed by that of practical implication.

Theoretical Implications

Men: For men, the only variable associated with physical IPV perpetration was avoidant attachment. No variables within the RAC model (shame or alexithymia) were associated with men's physical IPV perpetration. Thus, the RAC model was not applicable to men's physical violence and the model's applicability to coercive versus non-coercive controlling physical IPV perpetration remains unstudied. Nevertheless, results suggest that avoidantly attached men who tend to cut-off from painful feelings and avoid intimacy, were more likely to perpetrate physical IPV.

Results are consistent with Bowlby's (1979) theory that avoidantly attached people fear closeness. Thus it possible that when avoidant men in this sample experienced distress associated with attachment -in particular when partners demanded intimacy beyond their capacity to provide it- these men used the most effective means of maintaining distance (that is, to forceful aggression that would frighten a partner into conforming). Once emotional distance is restored, they gain back their sense of emotional control. Furthermore, because deeply negative internal working models that encompass strong mistrust, cynicism and limited empathy for others has been associated with avoidant persons (Rholes, Simpson, & Grich Stevens, 1998), it is unsurprising that avoidant men would have little hesitation to resort to using more severe physical aggression over psychological aggression that may be less impactful at pushing away a partner . In addition, because avoidant men are so used to evading emotions, it is possible that they lack the overall capacity to understand their own feelings. As such, they may have struggled to respond to questionnaires exploring shame and alexithymia that require internal reflections of their feelings; and it may be premature to

conclude a lack of relationship between these variables and avoidant men's IPV perpetration without further exploration. Overall, the present findings relating avoidant attachment and physical IPV was obtained against a backdrop of inconsistent literature, with some studies (Babcock et al., 2000; Holtzworth-Monroe, Meehan, Herron, Rehman, & Stuart, 2000) but not others (Dutton et al., 1994; Holtzworth-Munroe et al., 1997; Orcutt et al., 2005) reporting associations between avoidant attachment and IPV perpetration. Given the preliminary nature of the present study and the inconsistency in existing literature, it is difficult for firm conclusions to be drawn without further contextualisation of IPV. Nevertheless what remains clear is that avoidant attachment was associated with the most severe types of IPV perpetration in this sample, suggesting that such men experience negative emotions the most intensely and have the poorest control over these feelings.

On the other hand, for men's psychological IPV perpetration, no associations were found with avoidant attachment whereas associations were found with all the variables from the RAC model. Interestingly, the same pattern of associations (i.e., no links to avoidant attachment but significant links to all variables within the RAC model) was found with control. That is, the pre-conditions to test the RAC model on both psychological IPV and control were present. In addition, control was found to highly correlate with psychological IPV, suggesting that a similar construct was being measured. For these reasons, control was used as a post-hoc alternative measure of psychological IPV perpetration on which to test the RAC model. Hereafter, psychological IPV as measured by the CTS2 and Frankland's (2011) Control scale are referred to as psychological aggression and control respectively.

Running structural equation modeling to test the RAC model, the model did not fit men's psychological aggression. However partial support for the model was found for men's control. Closer analyses revealed that differences in the psychometric tests used possibly accounted for this unexpected finding. In Brown et al.'s (2010) original study on domestically violent men, the Abusive Behaviour Inventory (ABI) (Shephard & Campbell, 1992) was used

to measure psychological IPV perpetration and support for the RAC model relating to men's psychological IPV perpetration was reported. In this study, the control scale (Frankland, 2011) was assessed to be a more compatible measure of psychological abuse to the ABI than the psychological aggression scale on the CTS2. Akin to the ABI, the control scale incorporated both verbal attacks and coercive control whereas the CTS2 only included verbal attacks without coercive control. Thus, this could be why partial support of the RAC cycle was found for control but not psychological aggression in this study. In addition, post-hoc analyses revealed that another possibility for the poor model fit for psychological aggression was that an additional factor common to both alexithymia and anxious attachment was influencing the model; and adding a factor significantly improved the models overall fit. In particular, this additional factor may need to be included between the abuse-rejection path, as this was the only path in the RAC model that was not significant. While it is beyond the scope of this study to determine the additional variable, it is posited that compared to the culturally Western sample in Brown et al.'s (2010) study where the abuse-rejection pathway was reported to be significant; in traditionally more patriarchal societies as Singapore, men's attitudes towards women may have played a pronounced role in abuse and needs to be included as an intervening variable in future studies. As such, it could be that the RAC model applies primarily to psychological abuse that involves coercive control, or that an additional variable needs to be included to improve the overall model.

Indeed only partial support for the RAC model was found. Contrary to expectation, the originally purported circular RAC model was not supported. In particular, findings supported evidence of a linear pathway of IPV beginning from anxious attachment; that led to shame; which then led to alexithymia; and finally ended in coercive control. Once again, the pathway linking abuse (coercive control) to rejection (anxious attachment) needed to complete the cycle of rejection-abuse was not significant. Hence, the theory that perpetrating IPV likely encourages further rejection by a partner was not supported. This finding was

unexpected and contradicted Brown et al.'s (2010) findings that a circular rejection-abuse model fitted their sample of men well. Several reasons were purported for the failure to find an abuse-rejection pathway. First, research has found that many women remained with partners even after repeated abuse (Feazelle, Mayers, & Deschner, 1984; McCollum & Stith, 2008). This may have been the case in the present sample, and abuse may have effectively reduced feelings of rejection when partners stayed, possibly out of coercion. It is likely that the abuse-rejection relationship is more complex than the direct relationship hypothesized; and as discussed previously, adding an additional variable between the abuse-rejection path may be necessary. Furthermore, before the circularity of the RAC model is dismissed, it is important to note that post-hoc power analyses suggested that it could have been a lack of power due to a small sample size rather than an absence of a relationship that limited the chances of finding a significant pathway between control and anxious attachment in the present study. For these reasons, while it may be that a linear rejection-abuse pathway better explains men's psychological IPV perpetration, it is still possible that adding an additional variable and/or utilising a larger sample could result in support for a circular model.

Pulling results together, the RAC model did not fit well with men's physical abuse, nor did it fit well with men's psychological aggression (when psychological aggression was measured outside the context of control). Notably, the poor reliability of men's self-reported physical violence frequency requires caution to be exercised when interpreting relevant results. With regard to psychological abuse, it was found that adding an additional variable to the model, possibly between the abuse-rejection path significantly improved model fit. Furthermore, when control was used as a post-hoc alternative measure of psychological abuse (that incorporated measuring psychological aggression in the context of various other coercive controlling tactics), a linear rejection-abuse model was indeed found to fit well. Nevertheless, the abuse-rejection path needed to complete a circular rejection-abuse pathway remained non-significant. Possible reasons for this were offered although it was also

underscored that a significant abuse-rejection path may have been found with a larger sample size.

Women: For women, the only significant relationship found between study variables and IPV perpetration was between shame and psychological abuse. With regard to insecure attachments, neither anxious nor avoidant attachments were associated with physical or psychological IPV perpetration per se. Interestingly however, post-hoc analyses found that anxious attachment was associated with women's coercive control. As stated previously, the primary difference between the control and the CTS2 psychological aggression scales in this study was that the CTS2 measured overt verbal threats, insults and shouting whereas the Control scale measured similar psychologically aggressive behaviours but in the context of concurrently exerting coercive control. Thus results suggest that the experience of shame was related to women inmates' overt use of psychological threats and insults; whereas anxious attachments (that is, women who fear rejection) were related to women's use of similar psychological aggression but in the context of coercive control.

Results suggested that when women in this study experienced shame and their sense of self was under attack, they resorted to using overt psychological threats and insults on their partners. By demeaning their partner, these women possibly felt a sense of justice that they subjected their partner to the same shame they experienced. Thus, they regain a sense of control and power over the source of their shame that helps repair their damaged sense of self and manage painful feelings (Tangney, Wagner, Fletcher & Gramzow, 1992). To explain the anxious attachment and coercive control relationship however, it is postulated that when anxiously attached women feared potential rejection and/or abandonment by their partner, they resorted to using various means (including psychological tactics) to control different domains of their partners' lives. These women likely experience ongoing anxiety regarding the uncertainty of rejection from their partners and these overt and covert control tactics are the only way they retain some sense of security that they have influence over their

relationship. Whether or not this may be a false sense of security, it has been theorized to serve as a coping mechanism to manage distressing feelings relating to potential loss (Creasey, 2002) because imminent relationship distress and failure are thought to trigger intense feelings of ineffectual anger, fear, and confusion in anxiously attached individuals (Lyon-Ruth & Jacobvitz, 1999)

Due to the lack of association between variables in the RAC model to women's IPV perpetration, no model fit analyses were carried out for women. Thus, the RAC model was deemed unsuitable to explain women's IPV perpetration in this sample.

In sum, the only associations found for women were between shame and psychological IPV perpetration, and anxious attachment and control. Specifically, it appeared that the shame and psychological aggression relationship reflected a more 'tit for tat' response – that is when women's own sense of self was under attack by a partner, they retaliated equally by trying to evoke the same sense of shame in their partner. The anxious attachment and coercive control relationship however reflected the use of control tactics by insecure women to foster a perceived sense of security over a relationship. Both the correlations found nevertheless reflected means of restoring a sense of control over a relationship and as a coping mechanism to regulate their own relationship distress. Due to the overall lack of associations between variable, the RAC model could not be tested on women's IPV perpetration. Results for women substantially differed to that of men's suggesting that different risk factors underlie men and women's perpetration.

Linking results from men and women together. On the surface, it appeared that men and women perpetrated controlling and non-controlling violence at comparable rates. It was found however that different underlying motivations were associated with men's and women's IPV perpetration. Supporting this view, although avoidant and anxious attachments were associated to physical and psychological IPV perpetration by men respectively, anxious attachments were only associated to women's use of control but not to physical or

psychological IPV perpetration per se. Furthermore, although partial support of the RAC model was found to explain men's psychological IPV perpetration as measured via control, the rejection-abuse pathways failed to explain any kind of IPV perpetration by women.

Several possibilities could account for this difference. First, it could be that in situations where both partners are violent and controlling; men exert more control and/or violence and thereby serve as a primary perpetrator, whereas women are motivated by counter-control to shield themselves from further abuse (Hamberger, 1997). Next, it is possible that while patriarchal family values in Singapore facilitate men in exerting control over women, women however have to struggle against patriarchy when exerting control over men (Swan & Snow, 2002). On the other hand, it could also be that more protective attitudes towards women in patriarchal societies (Felson 2002) render it less consequential for women to exert violence against men. Thus, women may use violence more freely than men, without requiring the same intensity of triggers (such as intense feelings of shame or rejection) to react with physical violence. Furthermore, men and women may differ in their motivations driving their use of control. Although men are able to use control to evoke terror in women, in general - with a few rarities – women are not able to intimidate and frighten men the same way (Langhinrichsen-Rohling, Neidig, & Thorn, 1995; Morse, 1995). Whatever the reasons, it was apparent that different explanations underlay men's and women's violence in this sample and it is not till further research is conducted that firm conclusions can be made. It is also important to note that results comparing men and women's responses were limited first by the poor reliability of men's report of physical IPV perpetration; and second, although men and women were generally matched on most demographic variables, differences were found in terms of their length and reasons underlying incarceration. Thus, the above gender comparisons need to be interpreted with some caution. Based on the current findings nonetheless, several preliminary implications of the present results on practice will be discussed.

Practical implications

This next section explores significant relationships found between risk factors and IPV perpetration and discusses potential implications for intervention. Notably, this is the first study to explore IPV in relation to attachment in Singapore and all suggestions offered are preliminary. Due to findings that different risks underlay men's and women's violence, implications for men and women will be discussed separately, beginning with men, followed by women.

Men: First, avoidant attachment linked to men's physical IPV perpetration, suggesting that avoidant men were at risk for perpetrating the most severe IPV in this sample. As avoidant attachments are at the core of anti-social personalities (Tweed & Dutton, 1998; Waltz, Babcock, Jacobson, & Gottman, 2000), clinicians may need to be more attuned to attitudes and behaviours that could jeopardize therapy. First, such men have been found to hold extremely hostile attitudes towards women (Lawson & Brossart, 2009); are more prone to treatment dropout (Chang & Saunders, 2002); and have difficulties empathizing or feeling remorse (Kraus & Reynolds, 2001). Furthermore, research by Babcock et al., (2000) reported that in line with anti-social traits, avoidant husbands tend to use aggression instrumentally; that is, as a tool to get what they want. Despite these challenges, research has evidenced that interventions that reduced perpetrators' attachment avoidance resulted in reductions in overall violence severity (Lawson & Brossart, 2009). Particularly, drawing upon an attachment perspective, it may be useful for therapy to help men understand their need to distance themselves to cope with overwhelming emotions in an attempt to maintain autonomy - due to an underlying belief that intimates will not be able to meet their needs (Lawson & Brossart, 2009). In addition, using the relational dynamic, clinicians may also discuss how pursuance from an intimate to maintain engagement when the man retreats may be experienced as distressing; and result in more severe IPV from the man to stop her demands (Lawson & Brossart, 2009). Indeed, should therapy involve the man's intimate, safety planning could

include teaching women strategies to reduce pursuance and allow men room and time to calm down when he retreats. At the same time, clinicians could work with men to reduce attachment avoidance by helping them develop a level of comfort in depending on and being intimate with a partner (Lawson & Brossart, 2009). Finally, men may need to learn skills to negotiate how much or little intimacy they are comfortable with (Dutton et al., 1994). In a nutshell, being aware of the link between avoidant attachment and physical IPV perpetration can alert clinicians to potential obstacles in working with such men. However, clinicians should not be discouraged, as research has reported that therapies aimed at reducing attachment avoidance resulted in violence severity reduction.

On the other hand, anxiously attached men were found to be more prone to perpetrating psychological IPV (both within and without the context of exerting coercive control). Indeed, a linear rejection-abuse pathway was found to be useful in explaining men's control. Thus, drawing upon this linear pathway, suggestions for intervention to treat psychological aggression and coercive control (aspects of psychological IPV measured by control in this study) are offered. Undoubtedly, psychological types of IPV have been found to result in deleterious mental and physical health consequences, and need to be targeted as much as physical IPV perpetration in interventions (Coker, Smith, Bethea, King & McKeown, 2000). In fact, psychological IPV typically involves a continuous threat of physical violence (Stark, 2007) and both variables of psychological IPV perpetration - psychological aggression and coercive control- were found to highly correlated to physical IPV perpetration in this sample. Therefore although the following discussion draws upon findings relating to control, strategies may inadvertently apply to physical IPV perpetration.

The current results linking anxious attachments and men's psychological IPV perpetration was found against a backdrop of similar research findings. This suggests that male batterers in Singapore of a similar calibre to the present sample may benefit from the integration of attachment-informed therapies to the currently administered *Duluth* type

interventions in Singapore. Indeed, promising attachment-based interventions have already developed over the past years to tackle relationship conflicts stemming from dysfunctional attachment (e.g., Dutton & Sonkin, 2003; Goldner, Penn, Sheinberg, & Walker, 1990; Johnson & Whiffen, 2003). Moreover emerging research has shown that batterers experienced positive change when treatment was tailored to their characteristics (Chang & Saunders, 2002; Saunders, 1996). Thus drawing upon findings from both this research and Brown et al.'s (2010) study evidencing the path from anxious attachment to shame, alexithymia, and finally to psychological types of IPV perpetration, potential integration of this knowledge to existing treatment is offered. As it is beyond the scope of this paper to explore detailed intervention strategies, only brief suggestions are presented.

Interventions are discussed practically in terms of the most commonly used group formats. Effectively, groups provide opportunities for men to use 'here and now' group processes to recognise, challenge and change their maladaptive understandings of relationships (Wallace & Nosko, 2003). Furthermore groups serve as a micro society (Klein, 1972) in which men can realize new skills without fearing judgment.

First, it is important to explore a man's history of childhood maltreatment, attachment and shaming during assessment. Clearly, multiple risk factors to IPV perpetration exist and the rejection-abuse pathway identified in this study is only one of many other trajectories to consider. Thus, assessments can sieve out men who perpetrate as a re-enactment of childhood attachment anxieties and appropriately direct them into attachment-informed programs.

Within the therapeutic group, therapists are responsible for creating a safe environment (i.e., a 'secure base') from which men can explore and develop (Wallace & Nosko, 2003). Here, an understanding of men's attachment narratives can help therapists attune and respond emphatically to unique defence strategies employed by men during group exchanges (Dutton & Sonkin 2003). This is a valuable skill for fostering relationships between men who are innately mistrusting (Bowlby, 1988). Inevitably, this 'secure base' is

the foundation from which all therapeutic work follows (Stern, 1985). Furthermore, it is in this new experience of security that potentially help men alter their understanding of how relationships work, and learn to appraise attachment threats as situations that can be managed without drawing upon deep-seated defence tactics (Mikulincer & Shaver, 2001) (including that of IPV). Lending support to this theory, Mikulincer and Shaver (2001) demonstrated in five studies that secure base priming led to reduced negative appraisals toward out-groups compared to positive affect and neutral control groups.

In accordance to fostering a 'secure base', therapists need to conduct themselves in ways that provide a sense of stability and connectedness to men (Bowlby, 1988). Thus before embarking on treatment, therapists should ensure that they are able to provide consistency and commitment. Especially because attachment informed groups ideally extend beyond the typical 20-24 weeks programs to at minimum 36 weeks (Wallace & Nosko, 1993); and any irregularities or early termination of the therapeutic alliance could cement men's need to utilize maladaptive defence strategies to cope with yet another loss.

Once group safety is established, men explore their early attachment disruptions in order to gain some understanding of the developmental trajectory of their own IPV perpetration. Moreover, via reflection on their own abuse experiences, men are encouraged to explore their victims' experiences (Brown et al., 2010). Thereby encouraging the development of 'mentalisation' capabilities. That is, their ability to perceive another's motivations, thoughts and feelings and separate it from their own (Fonagy, 2001). In addition to increasing men's victim empathy, it is desired that developing men's mentalisation abilities may reduce his escalation to shame by reducing his chances of misinterpreting neutral signals from a partner as threats of rejection. At this point, men may benefit from identifying their unique triggers to shame brought on by their partners and practice using mentalising abilities to think about what may be motivating their partners other than an intention to reject or harm them.

Particularly, male inmates were found to employ alexithymic strategies to combat shame. To address this, it is important to first recognize the utility of this coping strategy and the short-term protection it may afford against abuse perpetration. More importantly however, to highlight the limitations of such a strategy and how in heighten conflicts, alexithymic strategies can fail. Particularly, instead of deterring men from attacking their partners, because alexithymia desensitises men from their feelings, men need to understand how this could pave the way to further abuse. It is also important to build men's awareness regarding the impact of using alexithymic strategies on partners and the kinds of partner responses alexithymia elicits. Indeed, some of these responses such as further pursuance from a partner during intense conflicts likely exacerbate IPV perpetration risk.

Alternatively men need to be equipped to manage shame. Wallace and Nokso, (1993) recommended getting men to explore their worst incidence of violence within the safety of a group and in doing so, build their tolerance to shame. Evidently, evaluations revealed that men's rates of perpetration reduced following such interventions (Wallace & Nosko, 2003). Additionally, examining painful childhood shame experiences and its connections to anger give men the opportunity to confront and alter their perceptions of their self-worth and sense of relating with people (Wallace & Nosko, 2003). Furthermore through dialoguing between group members, men are encouraged to identify, differentiate and describe their emotions, skills that alexithymic individuals particularly lack.

Drawing from the pathway to IPV perpetration found in this study, some brief suggestions of attachment informed therapies have been presented. Namely, strategies to target men's insecure attachments, their vulnerability to shame and their use of alexithymia have been suggested that may help break the pathway from anxious attachments to IPV perpetration found in this study. Notably, attachment informed IPV research is still evolving and strategies suggested are meant to supplement and be integrated into but not substitute existing interventions. As this paper could not provide detailed discussions of therapeutic

intervention, readers may refer to papers such as Brown, (2012), Dutton and Sonkin (2003), Goldner and colleagues (1990) or Wallace and Nosko, (2003) for fuller descriptions of attachment-informed interventions for IPV.

Women: Like the men in this study, women too reported perpetrating both controlling and non-controlling IPV. However, their underlying motives appeared to differ to men's. The only risk factors associated to IPV perpetration was between shame and psychological IPV perpetration and anxious attachment and coercive control. Thus, it may be worthwhile to explore shame and rejection management strategies in the context of treating anxiously attached female IPV perpetrators. These strategies are akin to those already discussed for men and will not be described fully. Specifically interventions adapted from Wallace and Nokso (1993) aimed at: examining painful childhood shame experiences and drawing connections to the perpetrators anger; doing exposure to shame related IPV incidences in order to build tolerance to shame; and teaching alternative and helpful ways of managing shame, may be usefully adapted to treat women. In this study, it therefore appeared that shame was the only component of intervention that could appropriately be applied to men and women.

Because results in the current study are preliminary, it is underscored that women's violence be further contextualized before results are used to guide treatment. For example, as researchers such as Swan and Snow (2002) suggested, women's violence should be explored in the context of their male partners' abuse against them. This would allow researchers to determine who the primary perpetrator is, even in the contexts of female perpetrated controlling violence. Furthermore, unlike men's IPV perpetration, women's IPV perpetration did not appear to follow a path of rejection to abuse in this study. Thus, although it is clear that the underlying risks and pathways to perpetration differ for men and women in this study, the motivations underlying women's violence remain unclear. As such recommendations for intervention are reserved till further research is conducted.

For women, only shame and anxious attachments were identified as risk factors for psychological IPV perpetration and suggestions for treatment were offered. Moreover, results suggest that although women like men reported controlling and non-controlling types of IPV perpetration, their pathway to violence followed different trajectories. Hence, at least for subjects in this study, although some parts of male IPV interventions may apply to treating females, the overall design of male IPV treatment would have limited use for treating women.

Summary: This is the first study to explore IPV in terms of attachment theory in Singapore. No doubt, findings are preliminary as are the aforementioned intervention strategies. As such, suggestions were meant to supplement and not substitute existing interventions. Ultimately, if service providers are able to integrate attachment-informed knowledge in helping men (and women) recognize the development and maintenance of IPV, this could translate into more effective interventions.

5.4 Limitations and future research

In order to enrich future studies, it is important to note the limitations of the present study. First, being a prison sample, all reports were retrospective and this likely influenced the accuracy in recalling IPV in their relationship(s). Second, questionnaires in this study were adapted from psychometrics designed to assess culturally Western respondents, and scorings were based on comparisons to Western norms. Thus, it would be useful to validate and obtain local norms for these questionnaires. Particularly problematic, the reliability of men's self-reported perpetration was low. One possibility is that men had difficulties relating to questions targeted at a Western audience. It may thus be useful for questions on IPV perpetration to be tailored to a Singaporean sample by using more common forms of violence found in Singapore and to use more localised language to word questions. Third, this study only utilized behavioural measures to ascertain IPV perpetration rates. In order to better understand the dynamics of IPV, future studies could investigate IPV in the context of their

partner's abuse on them, relational triggers, and respondents perceptions of IPV. This would not only help contextualize IPV but also inform how perceptions of IPV influence perpetrators' responses to questions on IPV perpetration, as it seemed to do in this study. In line with this, future studies may include a measure of social desirability to ascertain accuracy of responding, particularly in a society like Singapore where IPV remains taboo. Fourth, several types of IPV could not be categorised in the present study. Thus, future studies could include an additional category of IPV to measure IPV where one partner is violent and another is non-violent but controlling. This will allow for all types of IPV to be included in analyses. Fifth, studies would benefit from assessing both partners in a dyad. Because the present sample was incarcerated, this was not possible and rates of self and partner reports could not be corroborated. Sixth, a larger sample, specifically targeting IPV services would likely gather more data on coercive controlling violence and allow for more meaningful evaluations. Seventh, in the present study, cluster analysis was used to obtain high and low levels of control. Although useful in producing groupings, clustering is specific to the present data set's structure and may not accurately be cross-compared with other studies. Notably, participants found to exert low levels of control (that is the non-controlling group) were only so relative to the others in this sample. Due to this being a criminal sample, it is possible that what is considered non-controlling in this study may not be so when compared to a normative sample. As such, it is possible that when compared to the wider population, the percentage of men and women in each IPV typology may differ. That is, with more men and women being considered to be controlling. Moreover, dichotomous groupings do not consider that many individuals experiencing SCV experience moderate levels of control (Frye, Manganello, Campbell, Walton-Moss, Wilt, 2007). Thus without knowing the degree of control within each control group, meaningful information is lost. With regard to determining violence use however, dichotomous categorizations did prove useful because any hesitation to self-disclose frequency of violence did not seem to

impact results. Evidently, although prevalence and frequency rates of self and partner assault reports did not match up when compared, for IPV typologies, both self and partner reported patterns were almost identical. Therefore, whilst retaining Johnson's (2006) categorization methods, it may be useful to additionally analyze control and violence on a scale of severity and frequency. Eighth, this study made some preliminary comparison between men and women. However, no information on the gendered attitudes of inmates was gathered. Singapore is a multi-cultural society where various pockets of society hold on to varying degrees of traditionally patriarchal values. Given that power and control issues have been identified as key to the conceptualization of IPV, future research may benefit from taking into account respondents' cultural and gendered identities; and include questions on how participants' gender views influence intimate relationships and conflict resolution. Indeed, patriarchal attitudes were posited as a potential missing variable in the RAC model that could have accounted for the lack of circularity found in this study. Ninth, in this study, findings relating to coercive control were conditional on post-hoc analyses. Thus, cross-validation on another sample is recommended. Tenth, prospective power analyses were not conducted in and because post-hoc power analyses in Chapter 3 suggested that a lack of power could have accounted for non-significant results, it is useful for future studies to conduct a priori power analyses to determine the minimum sample needed. Last, given the size and specificity of the present sample, and the existing lack of directly comparable data, results are limited to the present forensic sample and are not representative of the wider population. Thus results cannot be extrapolated to the broader Singapore community. Further studies on larger and broader sample are needed to determine the generalisability of these findings. Pulling together the above information, future studies may benefit from taking the aforementioned limitations into account and continue to expand IPV research in Singapore.

In addition to addressing the limitations of the current study future studies may be guided by several of the current findings. Presently, majority of research understandably

focuses on IT as it is known to cause the most severe consequences. Nevertheless the high proportion of SCV found warrants further investigation of its dynamics. Especially in combination with multiple other risk factors that come together with populations like the present, the danger of escalation is high. Next, results suggested that it is useful for future studies to explore adding a variable between the abuse-rejection pathway that was not found to be significant in the present study; and to ensure enough statistical power, a minimum sample of 200 is recommended. Last, evidence of female perpetration of both controlling and non-controlling IPV necessitates further research to understand and contextualize female violence and male victimisation. While findings for female perpetration were inconclusive from this study, they nonetheless suggest that future studies should further contextualize and explore different models of IPV needed to explain female perpetration. It is particularly hoped that researchers in Singapore will expand upon the present study and work towards a common goal of reducing IPV perpetration; and in the process, demystify female perpetration and reduce stigmatisation relating to male victimisation.

5.5 Conclusion

This study aimed to contribute to local knowledge of IPV within Singapore, particularly from a forensic context that had never been previously studied. At the same time, it set out to expand upon the inadequate patriarchal conceptualization of IPV by exploring IPV from a gender and culturally neutral attachment framework. Overall, it was found that consistent with much Western research, women in this sample reported higher rates of IPV perpetration than men, and that both sexes reported perpetrating controlling and non-controlling violence. At a glance, results appeared to suggest gender comparable IPV perpetration. However, results need to be interpreted with caution due to the poor reliability of men's self-reported physical IPV perpetration and several preexisting differences between men and women. Moreover, closer analyses revealed that different underlying motivations

and trajectories of violence explained men and women's violence. For one, the associations between insecure attachment and IPV differed for men and women. Furthermore, although a linear rejection-abuse pathway was found to explain men's control use, no such pathway was found for women's IPV perpetration. From results, several implications were drawn. First, although findings highlighted the need to pay attention to both male as well as female IPV perpetration, especially given that male victimisation has been long ignored; at the same time, results alert researchers of the risks of interpreting male and female perpetration rates at face value, and underscore the need to contextualize IPV. Second, results suggest the need to explore models of IPV perpetration unique to each sex and not merely adapt male interventions for females. Third, as results relating to male perpetration were found against a backdrop on consistent research, recommendations for integrating attachment-informed therapy to existing patriarchal batterer programs were offered. No doubt preliminary, this study accomplished what it set out to do. It is the first to shed light on the dynamics underlying IPV perpetration in Singapore and offered preliminary suggestions to improve existing batterer interventions. While several factors limited this study, they were acknowledged and suggestions for enriched future research were put forward.

References

- Archer, J. (2000). Sex differences in aggression between heterosexual partners: A meta-analytic review. *Psychological Bulletin*, 126(5), 651-680. doi: 10.1037//0033-2909.126.5.651
- Babcock, J., C., Jacobson, N. S., Gottman, J., M., & Yerington, T., P. (2000). Attachment, emotional regulation, and the function of marital violence: Differences between secure, preoccupied, and dismissing violent and nonviolent husbands. *Journal of Family Violence*, 15(4), 391-409.
- Babcock, J. C., Green, C. E., & Robie, C. (2004). Does batterers' treatment work? A meta-analytic review of domestic violence treatment. *Clinical Psychology Review*, 23(8), 1023-1053. doi: 10.1016/j.cpr.2002.07.001
- Bowlby, J. (1969). *Attachment and loss: Attachment*. New York, NY: Basic Books.
- Bowlby, J. (1980). *Attachment and loss. Vol. 3*. New York, NY: Basic Books.
- Bowlby, J. (1988). *A secure base: Parent-child attachment and healthy human development*. New York: Basic Books.
- Brown, J. (2012). Male perpetrators, the gender symmetry debate, and the rejection-abuse cycle: implications for treatment. *American journal of men's health*, 6(4), 331-343. doi: 10.1177/1557988312439404
- Brown, J., James, K., & Taylor, A. (2010). Caught in the rejection-abuse cycle: are we really treating perpetrators of domestic abuse effectively? *Journal of Family Therapy*, 32(3), 280-307. doi: 10.1111/j.1467-6427.2010.00494.x
- Brownridge, D. A. (2010). Does the situational couple violence- intimate terrorism typology explain cohabitators' high risk of intimate partner violence? *Journal of Interpersonal Violence*, 25(7), 1264-1283. doi: 10.1177/0886260509340544

- Carney, M. M., & Buttell, F. P. (2005). Exploring the relevance of attachment theory as a dependent variable in the treatment of women mandated into treatment for domestic violence offenses. *Journal of Offender Rehabilitation*, 41(4), 33-61. doi: 10.1300/J076v41n04_02
- Cassidy, J., & Shaver, P. R. (1999). *Handbook of attachment: Theory, research, and clinical applications*. New York: Guilford Press.
- Centers for Disease Control and Prevention. *Intimate partner violence: Risk and protective factors*. National Center for Injury Prevention and Control, Division of Violence Prevention, Retrieved from <http://www.cdc.gov/violenceprevention/intimatepartnerviolence/riskprotectivefactors.html>.
- Chang, H., & Saunders, D. G. (2002). Predictors of attrition in two types of group programs for men who batter. *Journal of Family Violence*, 17, 273-292.
- Cheong, C. W., & Bong, B. (2010). *International violence against women survey: The Singapore Report*. Retrieved from <http://www.ncss.gov.sg/VWOcorner/abstracts.asp>
- Coker, A. L., Smith, P. H., Bethea, L., King, M. R., & McKeown, R. E. (2000). Physical health consequences of physical and psychological intimate partner violence. *Archives of Family Medicine*, 9, 451-457.
- Desmarais, S. L., Reeves, K. A., Nicholls, T. L., Telford, R. P., & Fiebert, M. S. (2012). Prevalence of Physical Violence in Intimate Relationships, Part 1: Rates of Male and Female Victimization. *Partner Abuse*, 3(2), 140-169. doi: 10.1891/1946-6560.3.2.140
- Dozier, M., Stovall-McClough, K. C., & Albus, K. E. (2008). Attachment and psychopathology in adulthood. In J. Cassidy & P.R. Shaver (Ed), *Handbook of attachment: Theory, research, and clinical applications* (2nd ed.). (pp. 718-744). New York, NY, US: Guilford Press.

- Dutton, D. (2003). Treatment of assaultiveness. *Journal of Aggression, Maltreatment & Trauma*, 7(1-2), 7-28. doi: 10.1300/J146v07n01_02
- Dutton, D., G., Saunders, K., Starzomski, A., & Bartholomew, K. (1994). Intimacy-anger and insecure attachment as precursors of abuse in intimate relationships. *Journal of Applied Social Psychology*, 24(15), 1367-1386.
- Dutton, D. G., van Ginkel, C., & Starzomski, A. (1995). The role of shame and guilt in the intergenerational transmission of abusiveness. *Violence and Victims*, 10(2), 121-131.
- Evren, C., Sar, V., Evren, B., Semiz, U., Dalbudak, E., & Cakmak, D. (2008). Dissociation and alexithymia among men with alcoholism. *Psychiatry and Clinical Neurosciences*, 62(1), 40-47.
- Feazelle, C. S., Mayers, R. S., & Deschner, J. P. (1984). Services for men who batter: Implications for programs and policies. *Family Relations*, 33, 217-223.
- Fonagy, P. (2001). *Attachment Theory and Psychoanalysis*. New York: Other Press.
- Fonagy, P. (2004). The developmental roots of violence in the failure of mentalization. In F. Pfäfflin & G. Adshead (Eds.), *A Matter of Security: The Application of Attachment Theory to Forensic Psychiatry and Psychotherapy* (pp. 13-56). London & New York: Jessica Kingsley Publishers Ltd.
- Foo, C. L., & Seow, E. (2005a). Domestic violence in Singapore: A ten year comparison of victim profile. *Singapore Medical Journal*, 46(2), 69-73.
- Foo, C. L., & Seow, E. (2005b). A comparison between male and female victims of domestic violence presenting to an emergency department in Singapore [Abstract]. *Academic Emergency Medicine*, 12(Supplement s1), 47.
- Frankland. (2011). *Domestic violence in same-sex relationships*. (Unpublished doctoral dissertation), Macquarie University, Sydney, Australia.

- Frye, V., Manganello, J., Campbell, J. C., Walton-Moss, B., & Wilt, S. (2007). The distribution of and factors associated with intimate terrorism and situational couple violence among a population-based sample of urban women in the United States. *Journal of Interpersonal Violence, 21*, 1286 – 1313.
- Goldner, V., Penn, P., Sheinberg, M., & Walker, G. (1990). Love and violence: Gender paradoxes in volatile attachments. *Family Process, 29*(343-364).
- Grabe, H. J., Rainermann, S., Spitzer, C., Gansicke, M., & Freyberger, H. J. (2000). The relationship between dimensions of alexithymia and dissociation. *Psychotherapy and Psychosomatics, 69*, 128-131.
- Graham-Kevan, N., & Archer, J. (2003). Intimate Terrorism and Common Couple Violence: A Test of Johnson's Predictions in Four British Samples. *Journal of Interpersonal Violence, 18*(11), 1247-1270. doi: 10.1177/0886260503256656
- Hamberger, L. K. (1997). Female Offenders in Domestic Violence. *Journal of Aggression, Maltreatment & Trauma, 1*(1), 117-129. doi: 10.1300/J146v01n01_07
- Harmon, P. A. (2002). Why do men batter women? Assessing empathy, self-regard and narcissism levels, and attitudes toward women, men's roles and family of origin experiences among middle to upper class male batterers. *Dissertation Abstracts International. Section B: The Sciences and Engineering, 62* (12-B), 6023.
- Harper, F. W. K. (2005). The role of shame, anger, and affect regulation in men's perpetration of psychological abuse in dating relationships. *Journal of Interpersonal Violence, 20*(12), 1648-1662. doi: <http://dx.doi.org.simsrad.net.ocs.mq.edu.au/10.1177/0886260505278717>
- Henderson, A. J. Z., Bartholomew, K., Trinke, S. J., & Kwong, M. J. (2005). When loving means hurting: An exploration of attachment and intimate abuse in a community sample. *Journal of Family Violence, 20*(4), 219-230. doi: 10.1007/s10896-005-5985-y

- Holtzworth-Monroe, A., Meehan, J. C., Herron, K., Rehman, U., & Stuart, G. L. (2000). Testing the Holtzworth-Monroe and Stuart (1994) batterer typology. *Journal of Consulting and Clinical Psychology, 68*, 1000–1019.
- Holtzworth-Munroe, A., Stuart, G. L., & Hutchinson, G. (1997). Violent versus nonviolent husbands: Differences in attachment patterns, dependency and jealousy. *Journal of Family Psychology, 11*(3), 314-331.
- Johnson, M. P. (2006). Conflict and control: gender symmetry and asymmetry in domestic violence. [Review]. *Violence against women, 12*(11), 1003-1018. doi: 10.1177/1077801206293328
- Johnson, M. P., & Ferraro, K. J. (2000). Research on domestic violence in the 1990s: Making distinctions. *Journal of Marriage and the Family, 62*, 948-963.
- Johnson, S. M., & Whiffen, V. (Eds.). (2003). *Attachment processes in couple and family therapy*. New York: Guilford.
- Jongwilaiwan, R., & Thompson, E. C. (2011). Thai wives in Singapore and transnational patriarchy. *Gender, Place and Culture: A Journal of Feminist Geography, 1-19*. doi: 10.1080/0966369x.2011.624588
- Kelly, J. B., & Johnson, M. P. (2008). Differentiation among types of intimate partner violence: Research update and implications for interventions. *Family Court Review, 46*(3), 476-499.
- Kernsmith, P. (2005). Treating Perpetrators of Domestic Violence: Gender Differences in the Applicability of the Theory of Planned Behavior. *Sex Roles, 52*(11-12), 757-770. doi: 10.1007/s11199-005-4197-5
- Kimmel, M., S. (2002). "Gender symmetry" in domestic violence. A substantive and methodological research review. *Violence against women, 8*(11), 1332-1363. doi: 10.1177/107780102237407

- Klein, A. (1972). *Effective groupwork: An introduction to principle and method*. New York:: Association Press.
- Kraus, G., & Reynolds, D. J. (2001). The "a-b-c's" of the cluster b's: Identifying, understanding, and treating cluster b personality disorders. *Clinical Psychology Review, 21*(3), 345-373.
- Langhinrichsen-Rohling, J., Neidig, P., & Thorn, G. (1995). Violent marriages: Gender differences in levels of current violence and past abuse. *Journal of Family Violence, 10*(159-176).
- Langhinrichsen-Rohling, J., Selwyn, C., & Rohling, M. L. (2012). Rates of Bidirectional Versus Unidirectional Intimate Partner Violence Across Samples, Sexual Orientations, and Race/Ethnicities: A Comprehensive Review. *Partner Abuse, 3*(2), 199-230. doi: 10.1891/1946-6560.3.2.199
- Laroche, D. (2005). *Aspects of the Context and Consequences of Domestic Violence - Situational Couple Violence and Intimate Terrorism in Canada in 1999*. Quebec: Government of Quebec: Institut de la statistique du Québec.
- Lawson, D. M., & Brossart, D. F. (2009). Attachment, interpersonal problems, and treatment outcome in group therapy for intimate partner violence. *Psychology of Men & Masculinity, 10*(4), 288-301. doi: 10.1037/a0017043
- Li, C. L. S. D. (1999). Face orientation and self-disclosure of ability and morality: Does gender make a difference? (Doctoral dissertation). The University of Hong Kong, Hong Kong, China.
- Margolin, G. (1987). The multiple forms of aggressiveness between marital partners: How do we identify them? *Journal of Marital and Family Therapy, 13*(7-84).
- Mauricio, A. M., Tein, J., & Lopez, F. G. (2007). Borderline and antisocial personality scores as mediators between attachment and intimate partner Violence. *Violence and Victims, 22*(2), 139-157.

- McCollum, E. E., & Stith, S. M. (2008). Couples treatment for interpersonal violence: A review of outcome research literature and current clinical practices. *Violence and Victims, 23*(2), 187-201.
- Mikulincer, M., & Shaver, P. (2001). Attachment theory and intergroup bias: Evidence that priming the secure base schema attenuates negative reactions to out-groups. *Journal of Personality and Social Psychology, 81*(1), 97-115.
- Morse, B. J. (1995). Beyond the conflict tactics Scale: Assessing gender differences in partner violence. *Violence and Victims, 10*(4), 251-272.
- Nathanson, D. L. (1992). *Shame and Pride: Affect, Sex, and the Birth of the Self*. New York: W.W. Norton.
- Nemiah, J. C., Freyberger, H., & Sifneos, P. E. (1976). Alexithymia: A view of the psychosomatic process. In O. Hill (Ed.), *Modern trends in psychosomatic medicine* (pp. 430-439). London & Boston: Butterworth.
- Orcutt, H. K., Garcia, M., & Pickett, S. M. (2005). Female-perpetrated intimate partner violence and romantic attachment style in a college student sample. *Violence and Victims, 20*(3), 287-302.
- Pence, E., & Paymar, M. (1986). *Power and control: Tactics of men who batter*. Duluth MN: Minnesota Program Development, Inc.
- Pence, E., & Paymar, M. (1993). *Education groups for men who batter*. . London: Springer.
- Roberts, N., & Noller, P. (1998). The Associations between Adult Attachment and Couple Violence: The Role of Communication Patterns and Relationship Satisfaction. In J.A. Simpson & W.S. Rholes (Eds.), *Attachment Theory and Close Relationships*. pp. 317-352. New York: Guilford Press.
- Ross, J. M. (2011). Personality and situational correlates of self-reported reasons for intimate partner violence among women versus men referred for batterers' intervention. *Behavioral sciences & the law, 29*(5), 711-727. doi: 10.1002/bsl.1004

- Ross, J. M., & Babcock, J. C. (2007, November). Antecedents to partner violence for antisocial versus borderline men. In R. E. Samper (Chair), *Psychopathology and intimate partner violence*. Symposium conducted at the Association for Behavioral and Cognitive Therapy Annual Convention, Philadelphia, PA.
- Saunders, D. G. (1996). Feminist-cognitive-behavioral and process-psychodynamic treatments for men who batter: Interaction of abuser traits and treatment models. *Violence and Victims, 11*, 383-414.
- Seow, E., & Foo, C. L. (2006). A profile of male domestic violence victims presenting to an emergency department in Singapore. *Hong Kong Journal of Emergency Medicine, 13*(4), 212-216.
- Shepard, M. F., & Campbell, J. A. (1992). The abusive behavior inventory. *Journal of Interpersonal Violence, 7*, 291–305.
- Sonkin, D. J., & Dutton, D. (2003). Treating assaultive men from an attachment perspective. *Journal of Aggression, Maltreatment & Trauma, 7*(1-2), 105-133. doi: 10.1300/J146v07n01_06
- Stark, E. (2007). *Coercive control: How men entrap women in personal life*. New York: Oxford University Press.
- Stern, D. N. (1985). *The Interpersonal World of the Infant*. New York: Basic Books.
- Straus, M. A. (2004). Prevalence of violence against dating partners by male and female university students worldwide. *Violence Against Women, 10*(7), 790-811. doi: 10.1177/1077801204265552
- Straus, M. A. (2008). Dominance and symmetry in partner violence by male and female university students in 32 nations. *Children and Youth Services Review, 30*(3), 252-275. doi: 10.1016/j.chilyouth.2007.10.004

- Straus, M. A. (2011). Gender symmetry and mutuality in perpetration of clinical-level partner violence: Empirical evidence and implications for prevention and treatment. *Aggression and Violent Behavior, 16*(4), 279-288. doi: 10.1016/j.avb.2011.04.010
- Straus, M. A., Hamby, S. L., Boney-McCoy, S., & Sugarman, D. B. (1996). The Revised Conflict Tactics Scales (CTS2): Development and Preliminary Psychometric Data. *Journal of Family Issues 17*(3), 283–316.
- Swan, S. C., & Snow, D. L. (2002). A Typology of Women's Use of Violence in Intimate Relationships. *Violence against women, 8*(3), 286-319. doi: 10.1177/107780120200800302
- Tutkun, H., Savas, H. A., Zoroglu, S. S., Esgi, K., Herken, H., & Tiryaki, N. (2004). Relationship between alexithymia, dissociation and anxiety in psychiatric outpatients from Turkey. *Israel Journal of Psychiatry and Related Sciences 41*(2), 118-124.
- Tweed, R. G., & Dutton, D. G. (1998). A comparison of impulsive and instrumental subgroups of batterers. *Violence and Victims, 13*(3), 217-230.
- van IJzendoorn, M. H., & Sagi, A. (1999). Cross-cultural patterns of attachment: Universal and contextual dimensions. In J. Cassidy & P. Shaver (Eds.), *Handbook of attachment*. New York: Guilford.
- Wallace, R., & Nosko, A. (1993). Working with shame in the group treatment of male batterers. *International Journal of Group Psychotherapy, 43*(1), 45-61.
- Wallace, R., & Nosko, A. (2003). Shame in male spouse abusers and its treatment in group therapy. *Journal of Aggression, Maltreatment & Trauma, 7*(1-2), 47-74. doi: 10.1300/J146v07n01_04
- Waltz, J., Babcock, J., Jacobson, N., & Gottman, J. (2000). Testing a typology of batterers. *Journal of Consulting and Clinical Psychology, 68*(658-669).

Warner, T. D. (2010). Violent acts and injurious consequences: An examination of competing hypotheses about intimate partner violence using agency-based data. *Journal of Family Violence*, 25, 183–193.

Appendix A of this thesis has been removed as it may contain sensitive/confidential content

Appendix B

Study Measures



COUPLE CONFLICT AND EXPERIENCES OF CLOSE RELATIONSHIPS

You are invited to participate in a research project looking at how your past experiences of close relationships are related to: your thoughts and feelings toward yourself, and how you manage conflicts in your intimate relationship(s). This research is done with the aim of improving services to people who have difficulties in managing conflict in their relationships or who have experienced aggression in trying to resolve conflicts in their relationship.

The study is being conducted by Ms Diane Chew, a post-graduate psychology student at Macquarie University and is being supervised by Dr Jac Brown, Senior Lecturer at Macquarie University. This research is for Ms Chew's post-graduate research project.

Your participation is *voluntary* and if you decide to participate, you will be required to complete a survey that may take between one to two hours to complete where you tick boxes to answer a series of questions on your experiences in a range of close relationships, and also on ideas about your own thoughts and behaviour.

Your participation is *CONFIDENTIAL* and you DO NOT have to reveal any identifying information. Information will never be traced back to you. This will be impossible, so we ask that you try to be as honest as possible. Once you have completed the survey, you will never be asked to participate in any further way. If you do not wish to participate in the survey, you may hand in a blank form. This survey will not affect your current sentence and privileges in any way, should you decide not to participate. Once the questionnaires are completed, they will be taken back to Macquarie University for coding. The information obtained from your responses will be analysed as a group by computer and published in scientific journals. Anonymous feedback will be provided to the research staff at Singapore Prison Service and should you wish to know the results regarding the research you may inform your Personal Supervisor who will then contact the relevant parties.

Should you feel any discomfort or distress as you go through the questionnaire, please stop at anytime to take a break before returning to complete the questionnaire. Or, should you feel too distressed to continue, you may stop filling in the questionnaire completely and hand in an incomplete questionnaire at the end. You may withdraw your participation anytime before the survey is handed in. After that, it would be impossible to match you with your response. If you wish to speak to someone about your distress, you may inform the Prison Officer present who will then approach your Personal Supervisor for you to speak to, or request for your Personal Supervisor to refer you to your prison counsellor. Otherwise, you may approach your Personal Supervisor directly.

After the survey, if you have any issues or regarding the research or the ethics of the study, please inform your Personal Supervisor who will then contact the relevant parties.

The ethical aspects of this study have been approved by the Macquarie University Human Research Ethics Committee. If you have any complaints or reservations about any ethical aspect of your participation in this research, you may contact the Committee through the Director, Research Ethics (telephone [+612] 9850 7854, fax [+612] 9850 8799, email: ethics@mq.edu.au). Any complaint you make will be treated in confidence and investigated, and you will be informed of the outcome. In addition, you may contact Ms Poon Baoqin, Research Officer at Singapore Prison Service about any ethical concerns you may have (telephone: +65 6546 8749, email: Poon_Baoqin@pris.gov.sg)



EXPERIENCE OF RELATIONSHIPS SURVEY PART A

Race _____ Religion _____

How long have you been in prison? _____ Years _____ Months

How long is your sentencing for? _____ Years _____ Months

How many times have you been in prison? _____

How many times were you caught by the police but not charged? _____

What were you arrested for? _____

What sorts of offences have you been charged for in the past?

If it was for a violent offence, who was the victim(s) (please tick the box(es) that apply to you.

You may tick more than one box):

Partner/Spouse

Other family
member

Children

Stranger

Someone
known to you
but not a family
member

☐

☐

☐

☐

☐

What are you currently in prison for?

If it was for a violent offence, who was the victim(s) (please tick the box(es) that apply to you.

You may tick more than one box):

Partner/Spouse

Other family
member

Children

Stranger

Someone
known to you
but not a family
member

☐

☐

☐

☐

☐

Current / Most Recent Relationship:

Are you currently in a married or in a relationship? (Circle One) **YES / NO**

If **YES**, how long have you been with your partner? _____ Years _____ Months

If **NO**, how long has it been since the relationship ended? _____ Years _____ Months

• How long were you in the relationship before it ended? _____ Years _____ Months

• Since your relationship ended, how often have you seen your partner?

Never

☐

A few times

☐

Many times

☐

Frequently

☐



Previous Relationships:

How many important relationships have you had before the current / most recent one? ____

How long have each of these relationships been? _____

Experience with the Police:

Have you ever had a personal protection order (PPO) filed against you? **YES / NO** (Circle One)

If **YES**, how long was the PPO placed on you? (in months) _____

How many times has a PPO been placed against you? _____

Experience Growing Up:

Tick the category that best reflects your relationships with your mother and father when you were growing up:

	Extremely close	Close	Neutral	Distant	Extremely distant
Mother	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Father	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How were you disciplined as a child at home for not doing as you were told when you were growing up?

	Never	Rarely	Sometimes	Frequently
Talked through the issue	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Yelled at to comply	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Privileges were withdrawn	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Verbally abused	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Physically forced to comply	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hit with hand or fist	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Kicked with foot	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hit with implement (ie belt)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Rate the punishment you received at home? (Circle One) **FAIR / UNFAIR / DON'T KNOW**

Do you have children? (Circle One) **YES / NO**

If Yes, how many children do you have? _____

How do you discipline your children at home?

	Never	Rarely	Sometimes	Frequently
Talked through the issue	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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Yelled at to comply	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Privileges were withdrawn	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Verbally abused	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Physically forced to comply	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hit with hand or fist	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Kicked with foot	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hit with implement (i.e. belt)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Rate the punishment you give at home? (Circle One) **FAIR / UNFAIR / DON'T KNOW**



Sometimes, it may be difficult for people to understand or even put into words what they may be feeling. We are interested to know how you experience your own feelings.

Please tick the box that best represents how much you agree or disagree with each statement.

	Strongly disagree				Strongly agree
	1	2	3	4	5
	1	2	3	4	5
1. I often get confused about what emotion I am feeling.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. It is difficult for me to find the right words for my feelings.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. I have physical sensations that even doctors don't understand.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. I'm able to describe my feelings easily.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. I prefer to analyse problems rather than just describe them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. When I'm upset, I don't know if I am sad, frightened or angry.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. I am often puzzled by sensations in my body.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. I prefer to just let things happen rather than to understand why they turned out that way.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. I have feelings that I can't quite identify.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Being in touch with emotions is essential.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. I find it hard to describe how I feel about people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. People tell me to describe my feelings more.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. I don't know what's going on inside me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. I often don't know why I'm angry.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. I prefer talking to people about their daily activities rather than their feelings.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. I prefer to watch "light" entertainment show rather than psychological dramas.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. It is difficult for me to reveal my inner most feelings, even to close friends.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. I can feel close to someone, even in moments of silence.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



19. I find examination of my feelings useful in solving personal problems. ☐ ☐ ☐ ☐ ☐
20. Looking for hidden meanings in movies or plays distracts from their enjoyment. ☐ ☐ ☐ ☐ ☐



It is normal for people to sometimes experience unpleasant feelings and thoughts that they may not like. We are interested to know how often this may be for you.

Please tick the box that describes how true each statement is for you. Please try to be as honest as possible.

Completely untrue of me	Mostly untrue	Slightly untrue	Slightly true	Mostly true	Describes me perfectly
1	2	3	4	5	6

	1	2	3	4	5	6
1. If I let people know what I'm really like, they would reject me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. I wish sometimes I could just disappear.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. I rarely keep longing for someone if I discover they don't care about me. (R)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Sometimes I feel as though I am in bits and pieces.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Sometimes I just want to hide.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. I am not comfortable admitting (even to myself) how much I would like to let myself need people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. I can imagine someone knowing me through and through and thinking me worthwhile. (R)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Sometimes I feel my life could just fall apart at the seams.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. I can't trust people enough to seek them out when I'm feeling weak.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. When I confide deeply in people, I feel anxious.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. I feel like an imposter.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. I might not be the best in the world, but I've done my best so far. (R)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. It's only a matter of time before people discover I'm a fake.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. I have such high ideals that even I can't live up to them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. I've often fallen in love with people who haven't loved me back.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. When I'm on my own my self-doubts eat away at me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. If people are kind to me, I feel I have to pay them back immediately.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. Often I feel just empty inside.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. Nobody needs people the way I need them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. I find it hard to trust my own hunches.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



The following statements concern how you feel in romantic relationships. We are interested in how you generally experience relationships, not just in what is happening in your past or current relationship(s). Respond to each statement by indicating how much you agree or disagree with it. Tick the column that corresponds with the rating scale below.

Please use the scale below by ticking a box between 1 and 7 in the boxes provided to the right of each statement.

	Disagree strongly			Neutral/mixed				Agree strongly
	1	2	3	4	5	6	7	
1. I prefer not to show a partner how I feel deep down.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. I worry about being abandoned.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. I am very comfortable begin close to romantic partners.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. I worry a lot about my relationships.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Just when my partner starts to get close to me I find myself pulling away.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. I worry that romantic partners won't care about me as much as I care about them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. I get uncomfortable when a romantic partner wants to be very close.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. I worry a fair amount about losing my partner.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. I don't feel comfortable opening up to romantic partners.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. I often wish that my partner's feelings for me were as strong as my feelings for him/her.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. I want to get close to my partner, but I keep pulling back.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. I often want to merge completely with romantic partners, and this sometimes scares them away.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. I am nervous when partners get too close to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. I worry about being alone.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. I feel comfortable sharing my private thoughts and feelings with my partner.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. My desire to be very close sometimes scares people away.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. I try to avoid getting too close to my partner.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. I need a lot of reassurance that I am loved by my partner.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. I find it relatively easy to get close to my partner.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. Sometimes I feel that I force my partners to show more feeling, more commitment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21. I find it difficult for myself to depend on romantic partners.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22. I do not often worry about being abandoned.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23. I prefer not to be too close to romantic partners.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24. If I can't get my partner to show interest in me, I get upset or angry.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25. I tell my partner just about everything.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
26. I find that my partner(s) don't want to be as close as I would like.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



- | | | | | | | | |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 27. I usually discuss my problems and concerns with my partner. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 28. When I'm not involved in a relationship, I feel somewhat anxious and insecure. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 29. I feel comfortable depending on romantic partners. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 30. I get frustrated when my partner is not around as much as I would like. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 31. I don't mind asking romantic partners for comfort, advice or help. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 32. I get frustrated when romantic partners are not available when I need them. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 33. It helps to turn to my romantic partner in times of need. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 34. When romantic partners disapprove of me, I feel really bad about myself | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 35. I turn to my partner for many things, including comfort and reassurance. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 36. I resent it when my partner spends time away from me. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |



Couples may sometimes take turns to make decisions or one person may make more of the decisions than the other. We are interested in what this is like for you and your past/current partner.

How often did this happen?

1	Once
2	Twice
3	3 to 5 times
4	6 to 10 times
5	11 to 20 times
6	More than 20 times
7	Not in the past year but it did happen
0	This has never happened

	1	2	3	4	5	6	7	0
1. I spent money or made financial decisions without talking to my partner about it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. My partner did this to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. I controlled or limited my partner's access to money.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. My partner did this to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. I made decisions for my partner, ordered them around or expected them to obey me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. My partner did this to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. I monitored my partner's time or made them account for their whereabouts.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. My partner did this to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. I limited my partner's use of the phone or computer.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. My partner did this to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. I made it difficult for my partner to see their friends or family.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. My partner did this to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. I complained that my partner spent too much time with their friends.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. My partner did this to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. I threatened to reveal my partner's sexuality to others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. My partner did this to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. I sent my partner texts or emails that threatened, harassed or insulted them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. My partner did this to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



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|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 19. I made my partner feel afraid through looks, actions or gestures. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 20. My partner did this to me. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 21. I threatened to hurt or harm my partner. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 22. My partner did this to me. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 23. I smashed or destroyed objects in front of my partner. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 24. My partner did this to me. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I called my partner names, put them down or otherwise | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 25. made them feel bad about themselves. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 26. My partner did this to me. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I insulted my partner or shamed them in front of other | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 27. people. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 28. My partner did this to me. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I withheld approval, affection or sex from my partner as | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 29. punishment. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 30. My partner did this to me. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I blamed my partner for all the problems in our | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 31. relationship | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 32. My partner did this to me | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 33. I told my partner that they were crazy. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 34. My partner did this to me. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |



No matter how well couples get along, there are times when they disagree, get annoyed with the other person, want different things from each other, or just have arguments or fights because they are in a bad mood, tired, or for other reasons. Couples also have different ways of trying to resolve their differences. This is a list of things that may have happened when you tried to resolve your differences with your partner.

Please try your best to recall the last relationship you experienced prior to your sentence in prison and tick how many times you did each of these things in the past year of your relationship, and how many times your partner did them to you in the past year of your relationship. If your partner did not do one of these things in the past year, but it happened before, circle "7".

How often did this happen?

1	Once in the past year
2	Twice in the past year
3	3 to 5 times in the past year
4	6 to 10 times in the past year
5	11 to 20 times in the past year
6	More than 20 times
7	Not in the past year but it did happen
0	This has never happened

	1	2	3	4	5	6	7	0
1. I showed my partner I cared even though we disagreed.	o	o	o	o	o	o	o	o
2. My partner showed care for me even though we disagreed.	o	o	o	o	o	o	o	o
3. I explained my side of a disagreement to my partner.	o	o	o	o	o	o	o	o
4. My partner explained his or her side of a disagreement to me.	o	o	o	o	o	o	o	o
5. I insulted or swore at my partner.	o	o	o	o	o	o	o	o
6. My partner did this to me.	o	o	o	o	o	o	o	o
7. I threw something at my partner that could hurt.	o	o	o	o	o	o	o	o
8. My partner did this to me.	o	o	o	o	o	o	o	o
9. I twisted my partner's arm or hair.	o	o	o	o	o	o	o	o
10. My partner did this to me.	o	o	o	o	o	o	o	o
11. I had a sprain, bruise, or small cut because of a fight with my partner.	o	o	o	o	o	o	o	o
12. My partner had a sprain, bruise, or small cut because of a fight with me.	o	o	o	o	o	o	o	o
13. I showed respect for my partner's feelings about an issue.	o	o	o	o	o	o	o	o
14. My partner showed respect for my feelings about an issue.	o	o	o	o	o	o	o	o
15. I made my partner have sex without a condom.	o	o	o	o	o	o	o	o
16. My partner did this to me.	o	o	o	o	o	o	o	o
17. I pushed or shoved my partner.	o	o	o	o	o	o	o	o
18. My partner did this to me.	o	o	o	o	o	o	o	o
19. I used force (like hitting, holding down, or using a weapon) to make my partner have oral or anal sex.	o	o	o	o	o	o	o	o
20. My partner did this to me.	o	o	o	o	o	o	o	o



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|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 21. I used a knife or gun on my partner. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 22. My partner did this to me. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 23. I passed out from being hit on the head by my partner in a fight. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 24. My partner passed out from being hit on the head in a fight with me. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 25. I called my partner fat or ugly. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 26. My partner called me fat or ugly. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 27. I punched or hit my partner with something that could hurt. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 28. My partner did this to me. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 29. I destroyed something belonging to my partner. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 30. My partner did this to me. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 31. I went to the doctor because of a fight with my partner. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 32. My partner went to a doctor because of a fight with me. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 33. I choked my partner. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 34. My partner did this to me. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 35. I shouted or yelled at my partner. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 36. My partner did this to me. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 37. I slammed my partner against the wall. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 38. My partner did this to me. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 39. I said I was sure we could work out a problem. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 40. My partner was sure we could work out a problem. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 41. I needed to see a doctor because of a fight with my partner but I didn't. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 42. My partner needed to see a doctor because of a fight with me, but didn't. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 43. I beat up my partner. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 44. My partner did this to me. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 45. I grabbed my partner. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 46. My partner did this to me. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 47. I used force (like hitting, holding down, or using a weapon) to make my partner have sex. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 48. My partner did this to me. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 49. I stomped out of the room or house or yard during a disagreement. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 50. My partner did this to me. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 51. I insisted on sex when my partner did not want to (but did not use physical force). | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 52. My partner did this to me. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 53. I slapped my partner. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 54. My partner did this to me. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 55. I had a broken bone from a fight with my partner. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 56. My partner had a broken bone from a fight with me. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 57. I used threats to make my partner have oral or anal sex. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 58. My partner did this to me. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 59. I suggested a compromise to a disagreement. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 60. My partner did this to me. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 61. I burned or scaled my partner on purpose. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |



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|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 62. My partner did this to me. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 63. I insisted my partner have oral or anal sex (but did not use physical force). | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 64. My partner did this to me. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 65. I accused my partner of being a lousy love. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 66. My partner did this to me. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 67. I did something to spite my partner. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 68. My partner did this to me. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 69. I threatened to hit or throw something at my partner. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 70. My partner did this to me. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 71. I felt physical pain that still hurt the next day because of fight with my partner. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 72. My partner still felt physical pain the next day because of a fight we had. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 73. I kicked my partner. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 74. My partner did this to me. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 75. I used threats to make my partner have sex. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 76. My partner did this to me. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 77. I agreed to try a solution to a disagreement with my partner suggested | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 78. My partner agreed to try a solution I suggested. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |