Does Women's Approval of Intimate Partner Violence Mediate the Relationship Between Sexism and Violence in Heterosexual Relationships?
A Cross-Cultural Comparison Between Sri Lanka and New Zealand.

Manuri Ranasinghe

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Abstract

The Revised Gender Symmetry Theory (Archer, 2018) proposes that western countries with higher levels of gender empowerment of women will experience an equal rate of physical intimate partner violence (IPV) between men and women that is bi-directional and low in intensity. In contrast, non-western countries with lower levels of gender empowerment are proposed to experience high rates of male to female aggression; bi-directional violence or male victimisation from women in such countries will be unlikely. The aim of this study was twofold. First, it aimed to test the validity of the Revised Gender Symmetry Theory using self-reports of IPV perpetration and victimisation from women residing in two countries above (New Zealand) and below (Sri Lanka) the mean global gender empowerment score. Second, considering the strong relationship between positive attitudes towards IPV with both sexism and IPV perpetration, the mediational properties of positive attitudes in explaining the relationship between sexism and IPV perpetration and victimisation in the two countries was examined. Female undergraduate university students from New Zealand (*N*=199) and Sri Lanka (*N*=198) completed the Conflict Tactic Scale-2, the Beliefs about Relationship Aggression Scale and the Ambivalent Sexism Inventory. Inconsistent with the Revised Gender Symmetry model, independent t-test analysis found that women in New Zealand and Sri Lanka reported similar rates of IPV perpetration and victimisation, for both minor and severe forms of IPV. In keeping with Sri Lanka having lower levels of gender empowerment of women, Sri Lankan women were more likely to approve of IPV and endorsed higher levels of sexism (benevolent and hostile sexism) when compared to New Zealand women. Lastly, the moderated mediation models found that attitudes condoning female IPV mediated the relationship between benevolent sexism and IPV perpetration by women in Sri Lanka and New Zealand. The need for interventions to challenge women's attitudes which condone female IPV and reduce societal sexism is discussed along with other implications for clinical practice.

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Table of Contents

List of Figures

List of Tables

List of Appendices

Introduction

Intimate partner violence (IPV) is a significant public health problem that affects people across a range of demographic characteristics across the world (Centers for Disease Prevention and Control, 2015; Dixon & Graham Kevan, 2011; Esquivel-Santoveña & Dixon 2012; World Health Organisation, 2013). For example, approximately 23.1% of women and 19.3% of men in western countries have reported experiencing physical violence during their lifetime (Desmarais, Reeves, Nicholls, Telford, & Fiebert, 2012a). Focusing in on sexual orientation reveals higher rates, with 44% of lesbian women and 26% of gay men reporting sexual, physical, or stalking victimisation during their lifetime (Smith et al., 2017). IPV is also seen across all types of relationship (e.g. dating, married, or cohabiting), ages (New Zealand Crime and Victims Survey, 2018) and in a range of countries (Krug, Dahlberg, Mercy, Zwi, & Lozano, 2002). In New Zealand over 34% of women and 12% of men have reported being victims of sexual abuse during their lifetime (New Zealand Crime and Victims Survey, 2018); 36.6% of women in the African regions experienced physical or sexual IPV at any point during their lifetime (World Health Organisation, 2013); approximately 27.5%–67.4% of women in Asian countries such as Cambodia, China, Papua New Guinea and Sri Lanka have experienced any form of sexual or physical IPV during their lifetime (Jewkes et al., 2017); and 35.5% of men in India, 26.6% of men in Mexico and 42.9% of men in South Africa have experienced minor forms of physical violence from their partners in the past 12month (Straus, 2008). Overall, this data demonstrates that IPV is prevalent for both men and women across a range of different countries. The complexity of IPV and the diverse range of people it impacts have led Dixon and Graham-Kevan (2020, p. 299) to define the problem using a broad and inclusive definition, stating that IPV constitutes "any form of aggression and/or controlling behaviour used against a current or past intimate partner of any gender, ethnicity, culture, sexual orientation, or relationship status (married, cohabiting, dating), and across age".

The high prevalence of IPV across countries is concerning given the adverse health outcomes that are associated with IPV (World Health Organisation, 2013; Campbell, 2002; Coker et al., 2002). A large amount of research has demonstrated that IPV leads to a range of negative physical and mental health outcomes for victims (Coker et al., 2002; Reid et al., 2008; Campbell, 2002; Domenech del Rio, & Sirvent Garcia del Valle, 2016). For example, men and women who experience physical, psychological or sexual IPV are at a higher risk of developing post-traumatic stress disorder (PTSD), depression, substance abuse, anxiety and suicidal ideation (Hines & Douglas, 2011a, Reid et al., 2008; Hines et al., 2007; Johnson & Leone, 2005; Coker et al., 2002; Campbell, 2002; Masho & Anderson, 2009; Ellsberg, Jansen, Heise, Watts, & Garcia-Moreno, 2008), joint disease, asthma, HIV risk factors, substance abuse, cardiovascular problems and sexually transmitted diseases (Breiding, Black & Ryan, 2005; Campbell, 2002). Furthermore, the consequences of IPV extend to the wider family. For example, children who witness IPV between parents are at higher risk of developing depression, anxiety, PTSD and conduct disorder (Carr, 2015). In addition to the negative health outcomes, IPV places a huge economic burden on the country with over $4.1 billion spent on services for IPV in New Zealand (Kahui & Snively, 2014). Thus, a comprehensive understanding of the mechanisms which causes IPV will allow researchers to prevent this behaviour and the negative health consequences associated with it.

Although IPV victimisation is associated with negative health outcomes for both men and women, previous research has primarily focused on men's use of IPV towards women. As a result, women's aggression towards men has been neglected and there is little research about the mechanisms that drive women's aggression. Furthermore, although IPV affects individuals of all ages, the group most commonly affected are those aged between 16-24 years (Archer, 2000; Rennison, 2001). For example, prior research has suggested that university samples have higher levels of IPV victimisation and perpetration when compared to the general public

(Stratus, 2008; Archer 2000) and that violence is most typically bidirectional in nature. This study aims to address the gender gap by investigating the mechanisms underlying women's perpetration and victimisation of physical IPV in a sample of university students. Understanding the factors that drive IPV among university students may help researchers to develop early interventions that can prevent IPV in relationships throughout adulthood.

Theories of IPV

Theoretical frameworks that attempt to explain the aetiology of IPV can guide strategies to reduce or eliminate IPV (Loseke, Gelles, & Cavanaugh, 2005). Evidence based practice (EBP) recommends psychological interventions to be informed by the best available research (Spring, 2007). However, there is controversy about the theory that best accounts for the nature and aetiology of IPV, which makes the development of interventions difficult. The most popular theory of IPV is the Gendered Theory which claims women are often the victims of abuse at the hands of men (Dobash & Dobash, 1979) and are aggressive primarily in self-defence (Pagelow,1984; Walker, 1989; Respect, 2008). Patriarchal values are proposed to set up social structures which place men in dominant positions over women (Dobash & Dobash, 1979) and are thought to be the cause of IPV. As an extension of this dominance, men can use physical violence to maintain power and authority within their relationship (DeKeseredy, 2011; Dragiewicz & Lindgren, 2009; Dobash & Dobash, 1988). Data supporting this theory has found significantly more male than female perpetrators (DeKeseredy, 2011; Dragiewicz & Lindgren, 2009; Dobash & Dobash, 1979; Walker, 1989) and that women living in patriarchal societies experience higher rates of victimisation relative to men (Levinson 1989, Archer, 2006; Subramaniam & Sivayogan, 2001). The Gendered Theory is currently the dominant model that informs IPV treatment (Pence, & Paymar, 1993). For example, the widely used Duluth treatment programme is grounded in Gendered Theory and aims to reduce IPV by

changing patriarchal social structures and educating men about how gendered beliefs may increase their violence towards women (Pence, & Paymar, 1993).

Contrary to the Gendered Theory, research has shown that women do use violence against their male partner for reasons other than self-defence (Esquivel-Santoveña, 2013; Follingstad, Wright, Lloyd, & Sebastian, 1991; Archer, 2000, 2002; Bates, Graham-Kevan, & Archer, 2014; Straus, 2004, 2008, 2011; Black et al., 2011; Hines & Douglas, 2016; Kar & O'Leary, 2010). Research from western countries has found approximately equal rates of IPV between male and females, or slightly higher female to male aggression (Fergusson, Horwood, & Ridder, 2005; Archer, 2000; Desmarais et al., 2012a). A meta-analysis by Archer (2000) reviewed 64,487 heterosexual men and women and found that women were more likely than men to use physical violence against their partners, although men were more likely to inflict injury with 62% of those reporting injury worthy of medical interventions being women. In a follow-up meta-analysis, Archer (2002) demonstrated that men and women used acts classified as severe physical aggression at equal rates, although those acts qualitatively differed, for example, women were more likely to throw something at their partner, slap, kick, bite, punch, or hit their partner with an object while men were more likely to beat up, choke or strangle their partner. There was no difference in the rates at which men and women used a knife or gun (Archer, 2002). Similar findings were reported in a meta-analysis by Straus (2008) using a sample of 4,239 students across 32 nations. The results indicated that the most common pattern of abuse was bidirectional with both partners being violent, followed by female-perpetration and lastly, male-perpetration. Overall, this data suggests that both genders use physical IPV to a similar extent. These studies question the validity of the Gendered Theory which suggests that IPV is usually perpetrated by men.

Furthermore, research has found no consistent association between patriarchy and men’s use of violence towards women as suggested by the Gendered Theory, with some

research even suggesting that men's patriarchal values are associated with less violence towards female partners (Dutton, 1995; Campbell,1992; Bookwala, Frieze, Smith, & Ryan, 1992**)**. For example, Sugarman and Frankel (1996) have found that husbands with a history of IPV perpetration did not typically adhere to traditional gender roles as expected by the Gendered Theory. Furthermore, research investigating the efficacy of treatment interventions based on the Gendered Theory has reported only small size-effects (Babcock, Green, & Robie, 2004). For example, a meta-analysis by Babcock et al. (2004) has found the efficacy of Duluth style treatment programmes to be in the small-range, suggesting a need for alternative theories to inform treatment design. Overall, although the Gendered Theory attracked much attention, the validity of the theory remains questionable. A better understanding of the mechanisms driving IPV may help researchers to develop more effective and targeted interventions to reduce IPV within society.

Gender-inclusive theories have been developed in response to data that has found gender symmetry in representative community and student samples in western countries (Archer, 2000; Kar & O'Leary, 2010; Stratus, 2008). They do not assume that women are primarily aggressive in self-defence but rather they may use aggression in response to intense emotions such as anger and jealousy or as a method of controlling their partner (O'Leary, Slep, & O'Leary, 2007; Medeiros & Straus, 2007; Esquivel-Santoveña, 2013). A range of gender-inclusive theories exists, including Family Conflict Theory, Social Learning Theory (SLT), personality theories and power theories (Bell & Naugle, 2008; Mihalic & Elliott, 1997; Dutton, 1995; Straus, 1977). For example, SLT suggests that IPV is learned during early childhood through the interactions with family and peers (Bowen, 1978, Mihalic & Elliott, 1997). More specifically, children who are exposed to IPV between parents or experience childhood abuse may model this violent behaviour in their future intimate relationships (Fang & Corso, 2007; Ernst et al., 2009). Personality theories such as Borderline Personality Organisation (BPO)

suggests that individuals who perpetrate IPV may have insecure attachment styles, leading to fear of rejection or distrust within the relationship (Dutton, 1995). This attachment style in conjunction with anger outbursts may lead to IPV perpetration when the individual perceives their partner as threatening (Dutton, 1995). The gender-inclusive theories place less emphasis on the impact of patriarchal values in explaining IPV and instead aims to understand IPV by investigating individual differences across people.

Nested Ecological Model:

The Nested Ecological Model (NEM) is a multi-level, multifactorial framework that accounts for individual differences in those who perpetrate IPV (Dutton 1985; 2006). It states that IPV occurs due to an interaction of multiple risk factors that operate at four different levels of an individual's environment: macro-systems, exo-systems, microsystems and the ontogenetic level (Dutton, 1985). The macro-system is the outer-shell of this model which includes cultural beliefs and values of the society. The exo-system represents the social structures such as social support, friendships or work environment. The microsystem includes the immediate context such as family units, family abuse and relationship dynamics. Lastly, the ontogenetic level includes the individual's developmental history such as cognitions, attitudes and learned behaviours. The NEM suggests that variation in IPV perpetration can occur due to the multiple ways in which the risk factors interact with each other within the individual (Dutton 1985; 2006). Thus, two people with the same risk factors may vary in their use of IPV due to the unique interaction of the risk factors within each person. The NEM has been supported by Stith, Smith, Penn, Ward & Tritt's (2004) meta-analysis which found that IPV perpetration occurs due to a range of risk factors such as attitudes condoning violence, emotional abuse, forced sex, illicit drug use and poor marital satisfaction. Similarly, O'Leary et al. (2007) found that IPV among men and women is associated with a range of factors such as dominance/jealousy, marital adjustment and partner responsibility. This demonstrates the

importance of taking a holistic approach and the need to consider multiple risk factors when attempting to understand IPV. Such a multifactorial framework of the NEM contrasts with the Gendered Theory which suggests that IPV is mainly caused by one risk factor (patriarchy). Instead, the NEM acknowledges that patriarchy is only one risk factor among a network of other interconnected risk factors. A limitation of the NEM is that this model just provides a topographical overview of the risk factors involved in IPV without any theoretical explanation for how the risk factors evolved or the pathway in which the multiple risk factors interact with each other to cause IPV (Dixon & Graham-Kevan, 2020). This limits the utility of the model to explain IPV and guide interventions to reduce or eliminate this social problem (Dixon & Graham-Kevan, 2020).

Methodological Variation in IPV Research

The conflicting positions of the Gendered and Gender-inclusive theories may have arisen due to variations in the samples studied (Johnson, 1995). For example, majority of the data supporting the Gendered Theory originates from studies with select samples, such as from women's refuges, women admitted to accident and emergency departments, non-violence intervention programmes, or crime cases reported to the police (Dobash & Dobash, 1998; Claes & Rosenthal, 1990; Harding & Helweg-Larsen, 2009). All of these samples yield a high proportion of female victims who have typically experienced severe violence (Mooney, 1994; Claes & Rosenthal, 1990; Dobash & Dobash, 1977-1978; Harding & Helweg-Larsen, 2009). Such a selective sample may not represent the rates of IPV within the general population (Gelles, 1990). Gender-inclusive theories have often investigated couples from the community who engage in bi-directional violence (Magdol et al., 1997; Morse, 1995; Straus & Gelles, 1988a). For example, the Family Conflict Theory investigates "common couple violence" which arise due to typical frustrations or conflicts within the relationship (Straus, 1990; Magdol et al., 1997; Morse, 1995; Straus & Gelles, 1988a). The current study will take into account for

such methodological differences and recruit female university students who are likely to have experienced bidirectional IPV, allowing an investigation into the mechanisms of IPV perpetration as well as victimisation (Stratus, 2008).

Revised Gender Symmetry Theory (Archer, 2018)

Archer's (2006) conducted a cross-cultural meta-analysis of sixteen nations which indicated that countries with low gender empowerment of women (GEM) had greater levels of female-victimisation than countries with higher GEM which showed more equal rates of IPV between the sexes. Archer (2006) suggested that the patriarchal values which prevail in countries with low gender equality are responsible for the high rates of male perpetration and female victimisation found in these countries. Results led to the proposal of Archer's (2018) Revised Gender Symmetry Theory which suggests that the Gendered Theory will best explain male to female unidirectional IPV in non-western countries with high patriarchal values and low gender empowerment of women, but not low severity bi-directional aggression found in western nations. According to this theory, bi-directional IPV and male victimisation is less likely to be found in non-western nations. The current study aims to test Archer's (2018) Revised Gender Symmetry Theory in two countries which differ in gender-equality (Sri Lanka and New Zealand). According to the Global gender-gap report, *(2018), Sri Lanka is below the mean global gender equality score while NZ is above the mean.* Furthermore, investigating IPV within a non-western country such as Sri Lanka is important given that the majority of research in this area has been conducted in western countries (Archer, 2018). Therefore, the current research may allow researchers to get a better understanding of the mechanisms driving women's IPV perpetration and victimisation across non-western countries.

The gender empowerment index (GEM) is a measure that is often used to calculate the gender equality of the country. It measures the gender-equality by gauging the empowerment

of women in that country. The GEM index consists of three elements: (a) the proportion of women in managerial, administrative, professional and technical posts (b) their share or earned income and (c) their parliamentary representation. The GEM index gives a score which ranges between 0-1, with 0 representing the highest level of gender inequality with low empowerment of women and 1 representing gender equality with high empowerment of women. Thus, a higher score on the GEM index reflects better gender-equality and greater empowerment of women in the economic and legal aspects of the country. The current study investigates IPV among two countries which are below (Sri Lanka) and above (New Zealand) the mean global gender equality score. Based on the Global Gender-gap Report (2018), New Zealand has a high GEM index of 0.801 which reflects high empowerment of women and greater gender-equality while Sri Lanka has a low GEM index of 0.676 which reflects low empowerment of women and lower gender-equality. Comparing these two countries with different GEM scores will allow us to test Archer (2018)'s Revised Gender Symmetry Model. If Archer (2018) Revised Gender Symmetry Model is accurate, we should expect to find more female victimisation and male perpetration among patriarchal countries with low empowerment of women such as Sri Lanka while countries with greater empowerment of women such as New Zealand should show gender symmetry or slightly more female perpetration.

Sri Lankan vs. New Zealand context

Sri Lanka is a highly patriarchal country with low representation of women in the economic, political and legal aspects of the country. For example, although men and women have similar literacy rates, women only represented 33.4% of the total workforce during 2010 (Gunawardane, 2016). Women are also underrepresented in political aspects of the country, with women representing only 5.6% of the national parliament during 2008 (Gunawardane, 2016). Instead of being career-driven, Sri Lankan women are often forced into restrictive

gender role as the "caretaker or housewife" while men are usually considered to be the "breadwinner" (Ruwanpura, 2011; Chandradasa & Rathnayake, 2019). Such stereotypic gender-roles places women in the subordinate position relative to men. This idea is further reinforced by religious beliefs such as Buddhism and Hinduism which views men as more dominant than women (Seneviratne & Currie, 1994**;** Gunatilake 1982). As an extension of men's dominance, they are allowed to use physical violence to maintain power and authority within the relationship (DeKeseredy, 2011; Dragiewicz & Lindgren, 2009; Dobash & Dobash, 1988). Indeed, 30% of married women in Sri Lanka aged between 18-49 years have reported experiencing physical abuse from their male partner during their lifetime (Subramanium & Sivayogan, 2001). Similarly, other research suggests that 25-35% of Sri Lankan women experience IPV (Guruge, Jayasuriya-Illesinghe, Gunawardena, & Perera, 2015). The stigma surrounding divorce in Sri Lankan communities makes it difficult for women to escape abusive relationship (Jayatilleke, Poudel, Yasuoka, Jayatilleke, & Jimba, 2010). In contrast to Sri Lanka, New Zealand has high levels of gender equality with a greater proportion of women in the economic, political, legal and decision-making positions of the country (Global gender-gap report, 2018). For example, women make up 41% of the parliament in 2019 which is significantly higher than Sri Lanka (Else, 2020). Furthermore, women's employment rate (62.5%) in New Zealand is similar to that of men (73.4%) (Household Labour Force Survey, 2017*)*. Furthermore, the New Zealand government is committed to improving gender equality within the country and has developed several initiatives to address gender issues. For example, the National Action Plan aims to improve gender equality by supporting leadership among women (UN Women, 2020). These initiatives may work to further reduce any gender gaps between men and women in New Zealand. Overall, the variation in gender empowerment between Sri Lanka and New Zealand makes these countries an appropriate group to test Archer (2018)'s Revised Gender Symmetry Theory.

There are currently few studies which have investigated the validity of Archer's (2018) Revised Gender Symmetry Theory. Levinson (1989)'s study investigated IPV among ninety small-scale societies, and as hypothesised by Archer (2018)'s model, it was found that greater gender empowerment of women was associated with less IPV victimisation. For example, the women who had more power outside of the home through the involvement in female-work groups reported experiencing less physical abuse from their partners and were more likely to use violence against their partners. These women who were involved in female workgroups had higher levels of gender empowerment through the access to independent wealth and social support outside of the home (Levinson, 1989). Furthermore, Straus (1994) investigated the prevalence of wife assaults in 50 states of the U.S (N = 6,002). In this study, the participants were asked to complete the Conflict Tactics Scales (CTS) (Straus 1979; 1990) which measures assaults in the past 12 months. The results showed an inverse relationship between wife assaults and women's social power within the society in which greater social power of women is related to lower victimisation scores. Similar results were reported in Vandello and Cohen (2005)'s cross-national study of 54 nations which found that the rates of victimisation among women increased in nations that had a poor status of women. These studies support Archer (2018)'s hypothesis that lower gender empowerment of women is associated with greater levels of victimisation while an increase in women's status leads to less victimisation and more perpetrations against men.

However, contrary to the Revised Gender Symmetry Theory (Archer, 2018), some studies have found that women in patriarchal countries used higher levels of low-intensity aggression against their male partner (Darko, Björkqvist & Österman 2019; Ndoromo, Österman & Björkqvist, 2018). For example, Ndoromo et al. (2018) aimed to test the Revised Gender Symmetry Theory (Archer, 2018) in South Sudan which is a patriarchal country with low empowerment of women. Men (N=118) and women (N=302) completed a self-report

questionnaire (Direct Indirect Aggression Scales for Adults-DIAS-Adult; Österman & Björkqvist, 2009) which measured low-intensity aggression across several domains (physical aggression, verbal aggression, nonverbal aggression, direct aggressive social manipulation, indirect aggressive social manipulation, cyber aggression and economic aggression). The results indicated that there was no difference between men and women in their use of low-intensity IPV across five aggression types (physical, verbal and nonverbal aggression, direct and indirect aggressive social manipulation). Furthermore, women used more physical aggression, direct aggressive social manipulation and economic aggression than men. These results are inconsistent with Archer (2018)'s Revised Gender Symmetry model which suggests that women in patriarchal countries should experience higher levels of victimisation and not engage in bi-directional IPV or aggress against men. Similar results were found in Darko et al. (2019) which investigated low severity IPV among men (*N*= 602) and women (*N*=602) in three different cities of Ghana: Tamale, Nsawam, and Accra. Similar to South Sudan, Ghana is a patriarchal society with low empowerment of women. The results indicated that men were more likely to be victims of low-intensity IPV including physical, indirect and non-verbal aggression than women. Furthermore, women were more likely than men to use low-intensity aggression against their partner including physical, indirect, nonverbal and cyber aggression. Overall, the results from Darko et al. (2019) and Ndoromo et al. (2018) are inconsistent with the Revised Gender Symmetry model which predicts that countries with low gender equality such as South Sudan and Ghana would show greater levels of female victimisation (Archer, 2018). Instead, women in these countries were using low-intensity aggression against their male partners.

Esquivel-Santoveña (2013) also found results which were inconsistent with Archer's (2018) Revised Gender Symmetry model. This study aimed to investigate the prevalence rates and the pattern of physical IPV among male and female university students in two countries

with varying levels of GEM scores (England vs. Mexico). Furthermore, the study investigated whether there were differences between the two countries in student's attitudes towards physical IPV and their motives for physical IPV. According to the United Nations Development Programme (2009), the UK has higher levels of gender empowerment of women (0.8) when compared to Mexico (0.6). The results indicated that across both countries, females perpetrated physical IPV at an equal or slightly higher frequency when compared to men. This pattern was seen across minor as well as severe forms of physical IPV, with the exception for females in the UK sample who experienced more severe physical aggression from their partners. These results are inconsistent with the Revised Gender Symmetry Theory (Archer, 2018) which suggests that patriarchal countries with lower gender empowerment of women such as Mexico should display more male-to-female violence. Instead, these results suggest that gender symmetry in IPV is also seen in patriarchal countries. The study also found that men and women across both countries used IPV in response to emotions such as anger or in retaliation to the psychological aggression perpetrated by their partners. Furthermore, women across both countries used physical IPV as a way of controlling their partner. These findings suggest that self-defence is not the only reason for IPV perpetration among women as suggested by the Gendered Theory (Dobash & Dobash, 1979; Respect, 2008), but instead, women and men across both countries use IPV for a number of other reasons. Lastly, the results indicated that men and women in both countries were more accepting of women's violence towards men than vice versa, which suggests that female IPV is more acceptable than men's, even in countries with low gender empowerment of women. Overall, contrary to the Revised Gender Symmetry Theory (Archer, 2018), this study demonstrates that women in patriarchal countries use high rates of IPV towards their male partner in a similar fashion to women in western countries with greater gender equality.

Taken together, the results from Darko et al. (2019), Ndoromo et al. (2018) and Esquivel-Santoveña (2013) question the validity of Archer (2018)'s Revised Gender Symmetry model. The current study extends this previous research by further investigating the Revised Gender Symmetry model among female students in two countries which are above and below the mean global gender equality score (Sri Lanka vs. New Zealand). Such cross-cultural research is will enable us to examine whether the risk factors for female IPV differ between the two countries. If differences exist, it indicates that culturally specific programmes are needed to reduce IPV in each country.

Sexism

There is limited understanding of the factors which are driving women's violence towards men. However, it has been suggested that sexism may play an important role in women's violence towards men. This idea is explained by Felson's chivalry theory (Felson, 2002). In contrast to patriarchy, Felson (2002) suggested that chivalry is the norm which prevails in western societies where women are often protected and cherished by men. Based on this view, violence towards women is viewed as negative because it violates the norm of protecting women from harm (Cauffman et al., 2000; Simon et al., 2001; Felson & Feld, 2009; Sorenson & Taylor, 2005; Davidovic, Bell, Ferguson, Gorski & Campbell, 2010) while women's violence towards men is understood as more acceptable (Sorenson & Taylor, 2005; Stewart-Williams, 2002). For example, women may perceive themselves as "weak" and incapable of hurting men who are considered to be larger, stronger and more powerful (Archer, 2000; Fiebert & Gonzalez, 1997; Anderson & Umberson, 2001; Miller & Simpson, 1991; Stuart et al., 2006). Therefore, women's violence towards men may be perceived as trivial, non-injurious and hence more acceptable (Archer, 2006). As a result, women's awareness of chivalry might disinhibit or facilitate their use of violence towards men. However, a major

limitation of the past research on chivalry is that it has been primarily conducted in western countries and there is limited knowledge about whether chivalrous norms exist in non-western countries with higher levels of patriarchy (Archer, 2006; Felson, 2002). Furthermore, chivalrous norms have been rarely investigated in countries with and without high levels of gender empowerment of women. To address this gap in the research, the present study is interested in investigating whether the chivalry norms will hold in two countries (New Zealand and Sri Lanka), which are above and below the mean global gender equality score.

Contrary to chivalry, the Gendered Theory suggests that patriarchy is the norm which prevails in society. These patriarchal values condone the use of violence towards women, leading to higher rates of male-to-female violence (Archer, 2006). These conflicting viewpoints can be neatly explained by the Ambivalent Sexism Theory (Glick & Fiske, 1996), which explains the roles that benevolent (a proxy measure for chivalry) and hostile (a proxy measure for patriarchal attitudes) sexism play on behaviour. The following section will discuss the Ambivalent Sexism Theory and how it influences IPV (Glick & Fiske, 1996).

Ambivalent Sexism Theory

The Ambivalent Sexism Theory is a social-psychology theory which has been developed to explain men's sexist ideologies towards women. This theory suggests that sexism is composed of two separate constructs: hostile sexism and benevolent sexism (Glick & Fiske, 1996). Hostile sexism is best defined as the explicit and overtly negative evaluation of women in which women are seen to control men by using their sexuality or feminist philosophies (Glick et al., 2000; Glick & Fiske, 1996). In contrast, benevolent sexism portrays a subjectively positive tone in which women are believed to be pure and kind beings who should be cared for and protected by men. As a result, benevolent sexism leads to prosocial behaviours (e.g., protecting/helping) and intimacy-seeking behaviour which goes against the overtly negative

views of women seen in hostile sexism. This ambivalence between hostile sexism and benevolent sexism occurs as men rely on women to fulfil their needs of intimacy and sexual reproduction while at the same time, they have the desire to maintain power and dominance in society. Men can process this dissonance by dividing women into two categories (good vs bad). For example, women who conform to traditional gender roles (e.g., home-keeper, caretaker) are perceived as good and are rewarded with benevolence while those who reject traditional gender roles (e.g., career women, feminists) are treated with hostility (Glick, Diebold, Bailey-Werner, & Zhu, 1997). Dividing women into these two categories allows men to hold both hostile sexism and benevolent sexism simultaneously.

Although benevolent sexism seems subjectively positive, it is still harmful and reinforces gender inequality within society (Glick, & Fiske, 2001a). For example, benevolent sexism restricts women into certain gender role through the use of "rewards". The women who conform to the certain gender roles such as home-keeper or caretaker are often "rewarded" with benevolence and are protected from harm while those who reject these gender roles are often "punished" with hostility (Glick et al., 1997). The rewards associated with conforming to traditional gender roles may further inhibit women from challenging the status quo and reaching gender equality. By adhering to such traditional gender roles, women are considered "warmer" but less competent when compared to men who are perceived as more competent (Glick & Fiske, 1996, 2001). For example, women who endorse benevolent sexism are less driven to build a strong career for themselves as they rely on men for financial stability (Rudman & Heppen, 2000; Moya, Expósito & Casado, 1999). This dependence on men for financial security may maintain gender-inequality within society. Although benevolent sexism limits women from reaching gender equality, it is important to acknowledge that benevolent sexism is often appealing to women. For example, women's endorsement of benevolent sexism is associated with greater life-satisfaction by making women feel as if society is fair and just

(Connelly, & Heesacker, 2012). This further decrease women's desire to challenge men's power and reach gender equality (Connelly & Heesacker, 2012). Overall, the research demonstrates that benevolent sexism is far from benign, but instead maintains male dominance within society.

Hostile and benevolent sexism drive certain attitudes that either approve or disapprove of IPV. For example, men with higher levels of hostile sexism are more likely to hold attitudes which support and accept violence towards women (Glick, Sakalli-Ugurlu, Ferreira, & Souza, 2002; Sakalli-Ugurlu & Ulu, 2003; Forbes, Jobe, White, Bloesch, & Adams-Curtis, 2005; Forbes, Adams-Curtis, & White, 2004; Yamawaki, Ostenson, & Brown, 2009; Chen, Fiske, & Lee, 2009). A study by Glick et al. (2002) demonstrated that hostile sexism was associated with attitudes that justify wife-abuse when controlling for other factors such as benevolent sexism, education level and age. Furthermore, men with higher levels of hostile sexism perceive relationships as a place of competition for authority and power, which may legitimise their use of violence against their female partner (Glick & Fiske, 1996). Consistent with this view, research has found that men with higher levels of hostile sexism are more likely to use IPV against their female partner, including physical violence, verbal aggression and sexual coercion (Forbes et al., 2004; Forbes & Adams-Curtis, 2001; Parrott & Zeichner, 2003; Renzetti, Lynch, & DeWall, 2018; Anderson & Anderson, 2008; Holtzworth-Munroe, Meehan, Herron, Rehman, & Stuart, 2000).

In contrast to the hostile sexism, benevolent sexism is associated with attitudes that disapprove of violence towards women as it violates the norm of protecting women from harm (Felson, 2002). Consistent with this view, research has shown that women's violence towards men is viewed as more acceptable within society than vice versa (Bethke & Dejoy, 1993; Sorenson & Taylor, 2005; Stewart-Williams, 2002). For example, violence perpetrated by men towards women is often perceived as harsher (Allen & Bradley, 2018; Dennison &

Thompson, 2011; Feather, 1996; Hamby & Jackson, 2010) and more frightening than women's violence towards men (Hamby & Jackson, 2010). Furthermore, psychologists were more likely to perceive psychological aggression as "abusive" if it was perpetrated by the husband than if the same acts were perpetrated by the wife (Follingstad, DeHart, & Green, 2004). Similarly, third parties were more likely to perceive men's violence towards women as a "crime" and therefore more worthy of police intervention than if the violence was perpetrated by women (Allen & Bradley, 2018). As a result, men may be more inhibited to use violence towards women as it carries greater sanction and significance. Supporting this idea, research has found that men's benevolent sexism is associated with less violence towards women. For example, Allen, Swan, and Raghaven (2009) has found that men with greater endorsement of benevolent sexism were less likely to report using violence against their female partner than men who endorsed lower levels of benevolent sexism. Overall, the current data suggest that benevolent sexism may set up attitudes which promote the protection of women. Taken together, the association between sexism and IPV demonstrates the importance of studying IPV within the broader social-cultural context.

Is Women's Sexist Attitudes Associated IPV?

Research on women's sexism and its association with IPV is limited, especially among women residing in non-western countries. Therefore, the current study aims to investigate this issue among women residing in two countries with varying levels of gender empowerment of women (Sri Lanka vs. New Zealand). A comprehensive understanding of the effect of sexism on women's IPV may allow researchers to develop targeted interventions to reduce IPV in each country. The following will discuss the limited research available on women's hostile and benevolent sexism and its association with IPV.

Women's hostility towards their own gender may have developed through previous experiences of rejection or attacks from other women (Cowan, Neighbors, & DeLaMoreaux, & Behnke, 1998). As a result, such negative experiences may have led to the formation of hostile stereotypes towards women (e.g., women are untrustworthy) (Cowan et al., 1998). Some research suggests that women's hostility towards their gender is associated with greater acceptance and approval of violence towards women (Cowan et al.,1998; Robertson & Murachver, 2007). This idea is captured in Robertson and Murachver (2007)'s study which has found that men and women who endorse higher levels of hostility towards women were more likely to condone male IPV and believe that women should remain in abusive relationships. Other research in the area of sexual abuse and rape has found that women's hostility towards their own gender was associated with greater acceptance of sexual abuse against women as well as the belief that female victims were responsible for the rape (Lonsway & Fitzgerald, 1995; Cowan, 2000). Furthermore, women who endorse higher levels of hostility towards their own gender are more likely to be victimised by their partners because they accept and tolerate men's violence (Robertson & Murachver, 2007). Overall, the research suggests that women's endorsement of hostile sexism towards their own gender is associated with higher rates of IPV victimisation as well as attitudes which accept men's violence towards women.

In contrast, women's endorsement of benevolent sexism may facilitate their aggression towards men. This idea is reported in Fiebert and Gonzalez (1997)'s study which investigated the relationship between benevolent sexism and IPV among a sample of 978 female college students from the U.S. Results indicated that aggressive women often trivialised their aggression by believing that they are weak and incapable of causing any injury to their male partner. Furthermore, they believed that men were strong enough to defend themselves against the violence perpetrated by women (Fiebert & Gonzalez, 1997). As a result, women were more likely to use IPV against men as they believed their violence was inconsequential and therefore

more acceptable. Furthermore, women did not fear any retaliation from their male partners as they believed that men are socialised to "not hit women" (Fiebert & Gonzalez, 1997). This demonstrates that benevolent sexism may facilitate women's use of IPV towards men. Furthermore, women who endorse higher levels of benevolent sexism are less tolerant of male IPV as they expect their partners to be caring, protective and respectful towards women (Chen et al., 2009; Allen et al., 2009). As a result, women who adopt benevolent sexist beliefs may have lower rates of IPV victimisation but greater levels of IPV perpetration towards men.

Taken together, previous research demonstrates that sexism is an important factor driving female IPV. However, majority of the previous research which investigated sexism among women has been conducted in western countries (Felson, 2002, Simon et al., 2001, Taylor and Sorenson, 2005) and there is limited understanding of how sexism operates in non-western countries with lower gender empowerment of women. To address this gap in the research, the current study aims to explore benevolent and hostile sexism among female university students in two countries which are above and below the mean global gender equality score (Sri Lanka vs. New Zealand).

Attitudes Towards IPV

As discussed above, sexism influences attitudes towards IPV, with benevolent sexism leading to attitudes condoning female IPV while hostile sexism is associated with attitudes condoning male IPV. Therefore, the aetiology of IPV should consider the important role of attitudes in explaining the relationship between sexism and IPV. Previous research has consistently shown that attitudes towards violence influence people's behaviour (Bonta & Andrews, 2016). For example, research conducted in the broader field of psychology has reported a strong association between attitudes supporting violence and the use of violence (Bonta & Andrews, 2016; Archer & Haigh, 1997; Huesmann, 1988). For example, according

to the Social Information Processing (SIP) model by Huesmann (1988), those who are aggressive tend to have more aggressive scripts which support or condone the use of violence (Huesmann, 1988). The General Personality and Cognitive Social Learning (GPCSL) perspective of criminal behaviour claims that pro-violent attitudes are among the Central Eight risk/need factors predicting recidivism (Bonta & Andrews, 2016). Attitudes condoning violence also plays an important role in the use of IPV (Henning, Jones, & Holdford, 2005; Spencer, Morgan, Bridges, Washburn-Busk, & Stith, 2017). For example, Robertson and Murachver (2007) have reported that male (*N*=24) and female prisoners (*N*=15) with a history of IPV had more positive attitudes towards the use of violence when compared to individuals from the community (*N*=66) or student population (N=67) with no prior history of IPV. Likewise, Pornari, Dixon and Humphreys (2018) have found that men who have committed IPV were more likely to approve the use of violence against a partner and endorsed higher levels of hostility towards women when compared to controls without a history of IPV. Furthermore, perpetrators of IPV show cognitive distortions which minimise or rationalise the severity of their aggressive acts (Bonta & Andrews, 2016). Taken together, the research suggests that attitudes condoning violence may be an important mechanism driving IPV. Given that the majority of the previous research investigating attitudes towards IPV have been conducted among men in western countries (Pornari et al., 2018), there is limited understanding about women's attitudes towards IPV, especially in patriarchal countries with poor gender empowerment of women such as Sri Lanka. To address this gap in the research, the current study aims to investigate women's attitudes towards IPV in two countries which are above and below the mean global gender equality score (Sri Lanka vs. New Zealand).

Although research has constantly shown a strong association between positive attitudes towards IPV and the use of IPV in heterosexual relationships, no previous research has investigated the role of attitudes in *explaining* the relationship between sexism and physical

IPV among women. Therefore, the current research will investigate whether attitudes towards IPV *mediate* the relationship between sexism and IPV perpetration and victimisation among women in New Zealand and Sri Lanka.

A study by Juarros-Basterretxea, Overall, Herrero and Rodríguez-Díaz (2019) is one of the only studies to date to examine the role of attitudes in explaining the relationship between ambivalent sexism and IPV. More specifically, this study has investigated whether attitudes towards IPV mediate the relationship between ambivalent sexism and the use of psychological IPV among 196 male prisoners from Spain. This study used the Partner Violence Attitude Scale (IPVAS; Smith, Thompson, Tomaka, & Buchanan, 2005) to measure participant's attitudes towards the use of violence in intimate relationships. Participants use of psychological aggression was measured using the Revised Conflict Tactic Scales (CTS2; Straus et al., 1996) and their level of sexism was measured using the Ambivalent Sexism Inventory (ASI; Glick & Fiske, 1996). The results indicated that positive attitudes towards IPV mediated the relationship between hostile sexism and psychological IPV, but not between benevolent sexism and psychological IPV (Juarros-Basterretxea, 2019). In fact, there was no direct or indirect relationship found between benevolent sexism and psychological IPV. This is expected since benevolent sexism aims to protect women from harm while hostile sexism may facilitate male-to-female IPV (Glick & Fiske, 1996). The current research extends on this study by investigating whether attitudes approving of IPV mediate the relationship between ambivalent sexism and physical IPV in a sample of female students from two countries which are above and below the mean global gender equality score.

Study Objectives

A comprehensive understanding of the factors causing IPV will allow researchers to design effective treatment interventions to target these factors and reduce the rates of IPV within societies (Loseke, Gelles, & Cavanaugh, 2005). However, research has suggested that

the aetiology of IPV may differ across cultures and therefore there is a need to investigate the causes of IPV within different countries to inform culturally specific interventions. Archer's (2018) Revised Gender Symmetry model suggests that countries with lower gender empowerment of women will have greater patriarchal social structures and high levels of hostile sexism towards women that will lead to higher rates of male-to-female violence within heterosexual relationships. In contrast, it has been proposed that in western countries with high levels of gender empowerment of women, benevolent sexism may increase women's use of aggression towards men (Archer, 2018; Felson, 2002). This study aims to investigate the rates of gendered IPV across countries that differ in their level of gender empowerment of women, as well as testing the role that sexism plays in explaining IPV in those countries. Two countries that are above (New Zealand) and below (Sri Lanka) the mean global gender equality score (Global gender-gap report, 2018) will be explored. Furthermore, considering the strong relationship between positive attitudes towards violence and the use of violence (Robertson & Murachver, 2007; Pornari et al., 2018) as well as the bi-directional nature of IPV (Straus, 2008), the current study aims to build mediational models that explore the role of attitudes towards IPV in explaining IPV perpetration and victimisation in both countries. Given the limited research on female IPV, this study will focus on female university students who have been shown to most frequently engage in and be the victims of IPV.

The following details and explains the hypothesis of the study.

Hypothesis 1. The first hypothesis examines if there is a difference in the rates of minor and severe physical IPV experienced and perpetrated by women in heterosexual relationships in New Zealand vs. Sri Lanka within the past 12months. Firstly, based on Archer (2018)'s Revised Gender Symmetry model and other research discussed earlier, it is hypothesised that women residing in the country with low gender empowerment of women (Sri Lanka) will

report higher rates of victimisation from men and lower rates of IPV perpetration than women residing in the country with higher gender empowerment of women (New Zealand). This is consistent with previous research which has shown high rates of female victimisation among women residing in non-western countries with lower empowerment of women (Subramanium & Sivayogan, 2001; Levinson, 1989; Stratus, 1979;1990; Vandello & Cohen, 2005). Furthermore, it is expected that women in New Zealand will display equal rates of IPV perpetration and victimisation (e.g., gender symmetry) or slightly higher rates of female perpetration as reported in previous research conducted in western countries (Archer, 2000; Archer, 2002; Stratus, 2008; Bates, 2014).

Hypothesis 2. The second hypothesis examines if there a difference in the level of approval of IPV held by women in heterosexual relationships in New Zealand and Sri Lanka. It is predicted that women in New Zealand and Sri Lanka will show a difference in their level of approval towards IPV. Based on the sexism literature, it is predicted that women residing in the country with higher levels of gender empowerment of women (New Zealand) will display greater approval for female IPV when compared to women residing in the country with lower gender empowerment of women (Sri Lanka) (Felson, 2002; Fiebert & Gonzalez, 1997; Miller & Simpson, 1991). Instead, the higher rates of hostile sexism predicted to be found in patriarchal countries such as Sri Lanka (Glick et al., 2000) may mean that women will be more accepting of men's use of violence towards women than vice versa.

Hypothesis 3. The third hypothesis examines if there a difference in the levels of sexism endorsed by women in heterosexual relationships in New Zealand and Sri Lanka**.** It is hypothesised that women in New Zealand and Sri Lanka will endorse different levels of sexism. Based on Felson (2002) and Archer (2006), it is expected that women residing in

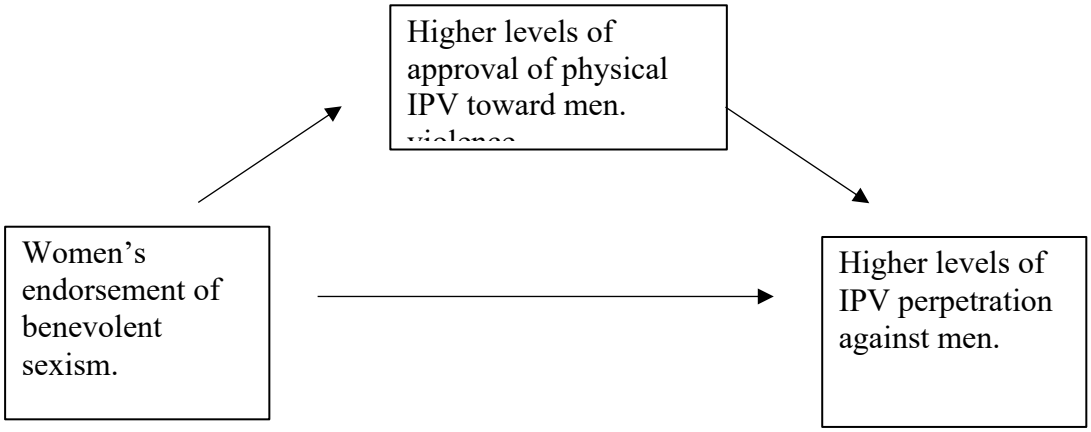
western countries (e.g., New Zealand) will express higher levels of benevolent sexism than women residing in non-western countries (e.g., Sri Lanka) who will express higher levels of hostile sexism. Previous research has shown that hostile sexism among women is higher in countries with low gender empowerment of women (Glick et al. 2000) while benevolent sexism may prevail in western countries with greater gender empowerment of women (Felson 2002; Fiebert & Gonzalez, 1997).

Considering the strong association between positive attitudes towards IPV and the use of IPV (Robertson & Murachver, 2007; Pornari, et al., 2018), as well as the bi-directional nature of IPV (Straus, 2008), it is predicted that attitudes towards IPV will mediate the relationship between sexism and IPV perpetration and victimisation for both countries. The predicted mediational models are outlined below.

Hypothesis 4. The fourth hypothesis examines whether attitudes condoning female IPV mediate the relationship between benevolent sexism and IPV perpetration among women. It is predicted that women who endorse higher levels of benevolent sexism towards their own gender will report using physical IPV more frequently against men, mediated by higher levels of approval of physical IPV towards men (see figure 1).

Figure 1

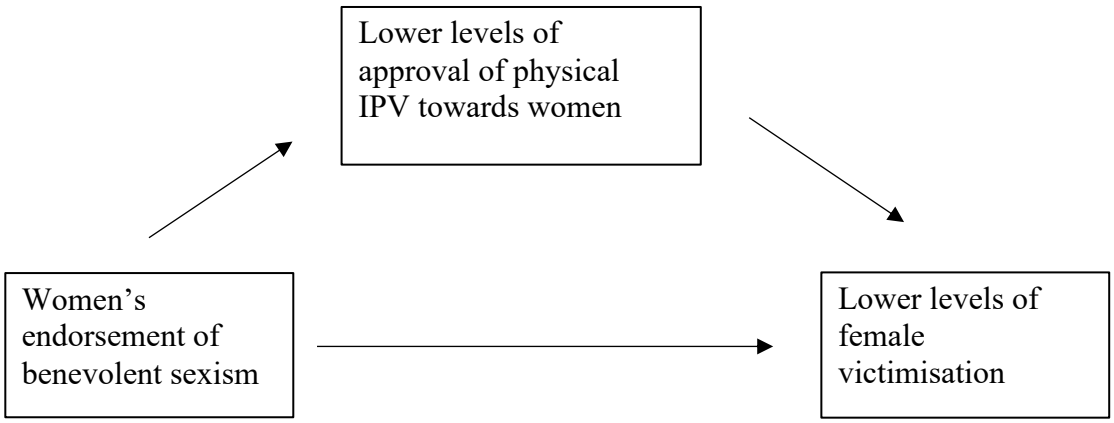
Model displaying the mediation effects of attitudes towards IPV in the relationship between benevolent sexism and IPV perpetration (Hypothesis 4).



Hypothesis 5. The fifth hypothesis examines whether attitudes towards female victimisation mediate the relationship between benevolent sexism and IPV victimisation among women. It is predicted that women who endorse higher levels of benevolent sexism towards their own gender will report lower rates of IPV victimisation, mediated by lower levels of approval of physical IPV towards women.

Figure 2

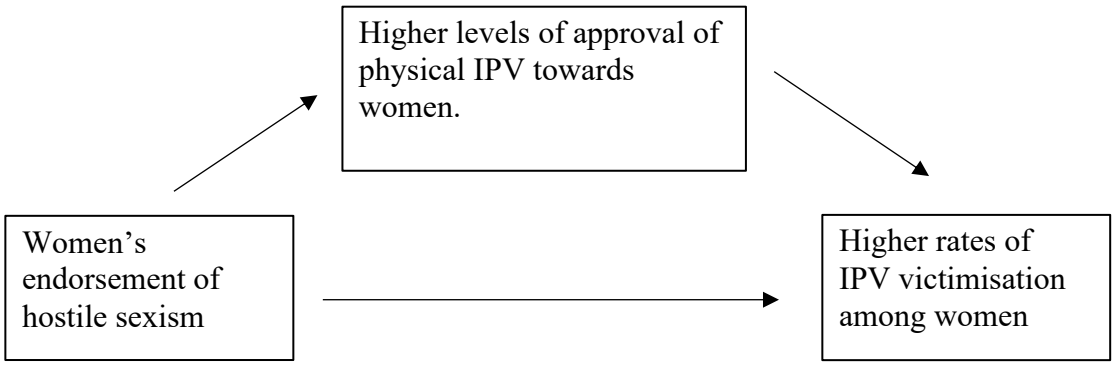
Model displaying the mediation effects of attitudes towards IPV in the relationship between benevolent sexism and IPV victimisation (Hypothesis 5).



Hypothesis 6. The sixth hypothesis examines whether attitudes condoning male IPV mediate the relationship between hostile sexism and IPV victimisation among women. It is predicted that women who endorse higher levels of hostile sexism towards their own gender will report higher rates of IPV victimisation, mediated by greater approval of physical IPV towards women.

Figure 3

Model displaying the mediation effects of attitudes towards IPV in the relationship between hostile sexism and IPV victimisation (Hypothesis 6).



Hypothesis 7. Hypothesis seven examines whether the mediation models differ between the two countries. Using moderated mediation models, it is predicted that the mediational effects of approval in IPV will be stronger in New Zealand than Sri Lanka for hypothesis 4 and 5, while the mediation model will be stronger in Sri Lanka for hypothesis 6. This is predicted given that benevolent sexism is expected to prevail in western countries with greater gender empowerment of women (New Zealand) (Felson, 2002) when compared to patriarchal countries (Sri Lanka) which would display greater hostility towards women (Glick et al., 2000).

Method

Participants

Participants were students recruited from two large urban based universities in New Zealand (Victoria University of Wellington) and Sri Lanka (the University of Kelaniya). The sample from the Victoria University of Wellington consisted of 233 women and 44 men while the sample from the University of Kelaniya consisted of 237 women and 40 men. Our research questions and measures applied exclusively to heterosexual women who had experiences in a romantic relationship. Our analyses excluded men (N =84), non-heterosexual women (N = 30), participants who had not been in a romantic relationship for at least 1 month in their lifetime (women = 25), and people who did not state their gender or sexual orientation (N = 18).

The eligible sample from the University of Wellington were 199 women enrolled in first-year psychology papers (M_{age} =19.10, SD_{age}=3.81). Women's self-identified ethnicities were: New Zealand European (N=149, 74.87%), other European (N=23, 11.56%), Māori (N= 9, 4.52%), New Zealand European and Māori (N=2, 1.01%), Asian (N=12, 6.02%), Mexican (N=2, 1.01%) and Pacifica (N=2, 1.01%). The participants reported their relationship status as: single (N=114, 57.29%), dating, but not living together (N=71, 35.68%), married (N=2, 1.01%), and in a relationship living together (N=12, 6.03%).

The eligible sample from the University of Kelaniya were 198 women enrolled in first-year psychology papers and social sciences subjects, such as Languages, History and Social Studies (M_{age}=22.72 SD_{age}=1.21). Women identified themselves as Sri Lankan Singhalese (N=178, 89.90%), Tamil (N=6, 3.03%), multiple ethnicities (Sri Lankan, Tamil and Singhalese) (N=6, 3.03%), or chose not to say (N=8, 4.04%). The participants reported their relationship status as: dating, but not living together (N=133; 67.17%), single (N = 62, 31.30%), in a relationship living together (N=1, 0.51%), married (N= 1, 0.51%), or did not provide any relationship status (N=1, 0.51%).

Procedure

The School of Psychology Human Ethics Committee approved the study under delegated authority to the Victoria University of Wellington Human Ethics Committee [project # 28040]. Ethical approval for the Sri Lankan sample was agreed by a senior lecturer from the Faculty of Languages at the University of Kelaniya.

New Zealand University Sample. Participants were recruited through the Introduction to Psychology Research Program (IPRP) in which participants are involved in different research projects in return for course credit. The study was advertised as "Perceptions and Experiences of Aggression in Heterosexual Intimate Relationships". Participants who chose to complete the current study were redirected to a Qualtrics website to complete the questionnaire (see Appendix A for the questionnaire, Appendix B for copies of the information sheet, consent form and Appendix C for debriefing information).

Sri Lanka University Sample. The author recruited participants in class. For ethical purposes, all students were told that they can participate in the study, but those who have been in a heterosexual relationship for one month or more could complete the whole questionnaire (see Appendix D for the questionnaire, Appendix E for copies of the information sheet, consent form and Appendix F for debriefing information). The questionnaire was translated from English to Singhalese and then back-translated to ensure consistency. The questionnaire was accessed by three Sri Lankan lecturers in the University of Kelaniya as well as five other native Sri Lankan speakers who deemed the questionnaire as culturally appropriate. Participants entered a random draw to win 1 of 5 prizes of New Zealand chocolate and stationery items (worth up to $30NZD each).

Measures

Predictor

Sexism. Women's sexism was measured using the Ambivalent Sexism Inventory (ASI) (Glick & Fiske, 1996, 2001b)**.** The ASI is a self-report questionnaire which examines both hostile sexism and benevolent sexism towards women. It consisted of 12 items in which six items were used to measure hostile sexism (e.g., "women exaggerate problems they have at work") and the remaining six items measured benevolent sexism (e.g., "women should be cherished and protected by men"). To examine participants' level of sexism, they were asked to rate the degree to which they agreed with each statement on a 7-point Likert scale (-3 = *Strongly Disagree* to 3 = *Strongly Agree*) with an additional item (4 = *I would rather not say*) which was excluded from the analysis. The ASI has good reliability for both hostile sexism (α = .80–.92) as well as benevolent sexism (α = .73–.85) and has been validated across many cultures (Glick & Fiske, 1996; Glick et al., 2000).

Mediator Variable

Attitudes towards the use of IPV in heterosexual relationships. Participants approval of physical IPV in heterosexual relationships were assessed using the Beliefs about Relationship Aggression Scale (BaRAS; Dixon, 2011). The BaRAS uses short vignettes to examine the participants' chivalrous or patriarchal beliefs towards the use of physical violence between men and women in heterosexual relationships under varying conditions. For example, each vignette manipulates three independent variables: a) the sex of the perpetrator (male vs female), b) the provocation by the victim (no provocation, infidelity, minor physical violence, severe physical violence, psychological aggression, and disobedience) and c) the severity of the physical acts used by the perpetrator (minor e.g., "slapped my partner" vs severe: e.g., "choked my partner"). This produced a 2x6x2 factorial design in which the 24 vignettes captured all of the manipulated conditions. Following the vignette, the participants were asked

to rate the extent to which they agree with the perpetrator's actions using a 5-point Likert Scale (0 = *not at all* to 4 = *definitely)* with an additional item (5 = *I would rather not say)* which was excluded from the analysis. The following is an example of a vignette used in this scale.

Imagine this Scenario: Carol discovered that John was having an affair with another woman. Then, one evening when John was sat on the sofa watching television Carol confronted him about his infidelity and slapped him across the face.

1) To what extent do you approve of Carol's actions?

   Pick your answer:

   0 = *Not at all,*
   1 = *A little,*
   2 = *Somewhat,*
   3 =*Mostly,*
   4 = *Definitely,*
   5= *I would rather not say*

Outcome variable

IPV Victimisation and Perpetration. Participants completed 38-items from the Revised Conflict Tactics Scale 2 (CTS-2; Straus, Hamby, Boney-McCoy, & Sugarman, 1996). Each item was completed in two forms to assess their *use* of physical violence toward romantic partners and their experiences of being a *victim* of physical violence from their romantic partners in the past 12months. Items were rated on the following 5-point Likert-type scale (0 = *This has never happened in the last 12 months* to 4 = *This happened very often in the last 12 months*) with an additional item (5 =*I would rather not say*) which was excluded from the analysis. Five items were averaged to assess *minor acts of physical violence* (α = .95; e.g., "threw something at my partner that could hurt" or "Slapped my partner") and seven items were averaged to assess *severe acts of physical violence* (α = .95; e.g., "Used a knife or gun on my partner" or "Choked my partner"). The CTS-2 has been validated across student and non-

student samples (Stratus et al., 1996; Graham-Kevan & Archer, 2003) and has demonstrated cross-cultural validity (Archer, 1999; Straus, 1990a; Straus, 2004).

Treatment of Data

The data analyses were conducted using the statistical package, IBM SPSS Statistics 26.0. Prior to data analysis, a series of preliminary analyses were conducted to check for outliers and to ensure that our data met the assumptions of normality. All our variables met the assumptions of skewness and kurtosis and there were no significant outliers identified (Field, 2013). Prior to data analysis, Little's MCAR test was conducted to examine whether the data were missing completely at random (MCAR). For the New Zealand University Sample, the values were missing completely at random (X^2=3174.89, DF=3193, p= .59) and list-wise deletion was used for the data analysis. The missing values analysis revealed that 12% of the total data was missing. The most missing variables came from item 6 of the CTS-2 which contained 4% of missing data. Similarly, the data from the Sri Lanka University Sample were also missing completely at random (X^2=1656.44, DF=185, p=1.00) and, therefore, list-wise deletion was used to conduct the statistical analysis. The missing values analysis revealed that 13.5% of the total data was missing. Most of the missing data came from item 14 from the BARAS and item 4 from the ASI which both had 4% of missing data each.

Results

Hypothesis 1: *Women residing in the country with low gender empowerment of women (Sri Lanka) will report higher rates of victimisation from men, and lower rates of IPV perpetration, than women residing in the country with higher gender empowerment of women (New Zealand) which should show bidirectional IPV at equal rates.*

Table 1 represents the frequency of physical IPV used and experienced by women in New Zealand and Sri Lanka during the 12 months prior to completing the questionnaire.

Table 1

The proportion of women in Sri Lanka (N=198) and New Zealand (N=199) who used physical IPV against their partner or experienced physical IPV from their partner within the 12 months prior to completing the questionnaire.

	The proportion of women who used physical IPV **(Perpetration)**		The proportion of women who experienced physical IPV **(Victimisation)**	
	Sri Lanka N (%)	**New Zealand** N (%)	**Sri Lanka** N (%)	**New Zealand** N (%)
Type				
Minor	63(31.80)	45(22.60)	40(20.20)	44(22.11)
Severe	17(8.60)	7(3.50)	42(21.20)	15(7.53%)
Total	80 (40.40)	52 (26.10)	82(41.40)	59(29.64)

Of the total sample, approximately 31.80% (*n*=63) of Sri Lankan women reported using minor physical violence against their partner within the past 12months, with approximately 8.60% (*n*=17) of women reported using severe physical violence against their partner. In the New Zealand sample, 22.60% (*n*=45) of women reported using minor physical IPV towards their partner during the past 12months while approximately 3.50%(*n*=7) of women reported

using severe physical IPV. In terms of victimisation, 20.20%(*n*=40) of Sri Lankan women has reported experiencing minor physical IPV from their intimate partner in the past 12months while 22.11%(*n*=44) of New Zealand women has reported experiencing minor victimisation from their partner within the past 12months. Furthermore, approximately 21.20% (*n*=42) of women in Sri Lanka has reported being victims of severe physical IPV while 7.53% (*n*=15*)* of women in New Zealand has been victims of severe physical IPV within the past 12months.

Table 2 shows the descriptive statistics for the rates of physical IPV victimisation and perpetration among women in Sri Lankan and New Zealand. Due to the multiple statistic tests conducted, a Bonferroni correction was applied to prevent the risk of a type I error (Field, 2013) and an adjusted *p*-value of 0.0125 was applied. Cohen's *d* was computed to investigate the magnitude of the difference between the two means with an effect size of 0.20 representing a small difference between the two means, 0.50 a medium difference and 0.80 a large difference.

Table 2

Descriptive Statistics and Independent Sample t-test results for physical IPV used and experienced by women in Sri Lanka vs. New Zealand.

	Sri Lanka			New Zealand			Country difference		
Measures	*N*	*M*	*(SD)*	*N*	*M*	*(SD)*	*t*	*p*	Cohen's *d*
Perpetration – Minor	197	0.16	0.33	198	0.14	0.35	0.62	0.54	0.06
Perpetration – Severe	197	0.03	0.11	197	0.01	0.08	1.63	0.11	0.21
Victimisation – Minor	197	0.09	0.24	198	0.16	0.39	-2.18	0.03	0.22
Victimisation – Severe	197	0.06	0.16	197	0.03	0.14	2.00	0.05	0.20

Note. Possible scores on the CTS ranged from 0-4. Bonferroni adjusted *p*-value is significant at 0.0125 level.

Table 2 also indicates the results of four independent-samples t-tests, conducted to compare the rates of minor and severe physical IPV perpetration and victimisation between women in Sri Lanka and New Zealand. Results show that women in Sri Lanka and New Zealand used similar rates of minor physical IPV ($t(393)=0.62$, $p=0.54$) and severe physical IPV ($t(343.66)=1.63$, $p=.11$) against their male partner. These findings are inconsistent with hypothesis 1 which predicted higher rates of physical IPV perpetration to be found among women in New Zealand when compared to women in Sri Lanka. Results also indicate that women in Sri Lanka and New Zealand experienced similar rates of minor physical victimisation ($t(326.82)=-2.18$, $p=.03$) and severe physical victimisation ($t(386.65)=2.00$, $p=.05$) from their male partner. These findings are also inconsistent with hypothesis 1 which predicted that women in patriarchal countries such as Sri Lanka would show higher levels of physical IPV victimisation when compared women residing in countries with higher gender empowerment (e.g., New Zealand). Taken together these results suggest that women in both New Zealand and Sri Lanka show similar patterns of physical IPV victimisation and perpetration.

Four paired sample t-tests were conducted to explore if there were significant differences between the rates of victimisation and perpetration of physical IPV for women within each country. Table 3 provides the descriptive statistics and results of the paired samples t-test. Results show that Sri Lankan women were significantly more likely to use minor forms of physical violence against their partner than be victims of minor physical IPV ($t(196)=4.53$, $p<0.001$). This finding is inconsistent with hypothesis 1 which predicted that women in Sri Lanka would be more likely to be victims of physical IPV than perpetrators of IPV, even for minor forms of physical IPV. However, for severe physical IPV, Sri Lankan women were more likely to be victims than perpetrators ($t(196)=4.51$, $p<.001$). As hypothesised, New Zealand women showed no significant differences between IPV

victimisation vs. perpetration for minor physical IPV ($t(197)=1.18$, $p=0.24$). Similarly, New Zealand women showed no significant differences between IPV victimisation vs. perpetration for severe physical IPV ($t(196)=2.27$ $p=.03$).

Table 3

Descriptive Statistic and Paired Sample t-test comparing the rates of IPV victimisation vs perpetration among women residing in Sri Lanka and New Zealand.

	Victimisation			Perpetration			Difference between victimisation vs perpetration		
Country	*N*	*M*	*(SD)*	*N*	*M*	*(SD)*	*t*	*p*	Cohen's *d*
Minor IPV									
Sri Lankan women	197	0.09	0.24	197	0.16	0.33	**-4.53**	**<.001**	**0.24**
New Zealand women	198	0.16	0.39	198	0.14	0.35	1.18	0.24	0.05
Severe IPV									
Sri Lankan women	197	0.06	0.16	197	0.03	0.11	**4.51**	**<.001**	**0.22**
New Zealand women	198	0.03	0.14	198	0.01	0.08	2.27	0.03	0.18

Note. Possible scores on the CTS ranged from 0-4. Bonferroni adjusted *p*-value is significant at 0.0125 level. Significant differences are shown in bold

Hypothesis 2: *Women residing in the country with greater gender empowerment of women (New Zealand) will display greater approval for female IPV when compared to women residing in the country with lower gender empowerment of women (Sri Lanka) which should show greater approval for men's use of violence towards women than vice versa.*

Between-country differences in the level of approval of physical IPV used by men and women were explored. Table 4 displays the descriptive statistics and the results of independent sample t-tests.

Table 4

Sri Lankan and New Zealand women's approval of gendered physical IPV (minor and severe). Descriptive Statistics and Independent Sample t-test results.

	Sri Lanka			New Zealand			**Country difference**		
Measures	*N*	*M*	*(SD)*	*N*	*M*	*(SD)*	*t*	*p*	Cohen's *d*
Approval of men's use of physical IPV (minor)	196	1.00	0.77	199	0.26	0.40	**12.03**	**<.001**	**1.21**
Approval of men's use of physical IPV (Severe)	194	0.76	0.79	199	0.06	0.21	**11.92**	**<.001**	**1.21**
Approval of female's use of physical IPV (minor)	195	0.90	0.79	199	0.52	0.65	**5.30**	**<.001**	**0.53**
Approval of female's use of physical IPV (severe)	193	0.69	0.73	199	0.23	0.36	**7.86**	**<.001**	**0.80**

Note. Possible scores on the BaRAS ranged from 0-4. Significant differences are shown in bold. Bonferroni adjusted *p*-value is significant at 0.0125 level

Four independent-sample t-tests were used to explore group differences in approval of men's and women's use of severe and minor physical IPV. Results found a significant difference across all of the conditions. Consistent with hypothesis 2, women in Sri Lanka showed higher levels of approval for men's use of minor physical IPV when compared to New Zealand women ($t(294.01)=12.03$, $p=<.001$). Similarly, women in Sri Lanka showed higher levels of approval for men's use of severe physical IPV when compared to New Zealand women ($t(219.01)=11.92$, $p=<.001$). Thus, women in Sri Lanka were more likely to approve of men's use of minor and severe physical IPV than New Zealand women. However, inconsistent with hypothesis 2, the results also found that Sri Lankan women showed higher levels of approval for minor physical IPV used by females when compared to New Zealand

women (t(376.46)=5.30, p=<.001). Similarly, Sri Lankan women showed higher levels of approval for severe physical IPV used by females when compared to New Zealand women (t(278.57)=7.86, p=<.001). Taken together, Sri Lankan women were more approving of IPV used by either gender when compared to women in New Zealand.

Further analysis was conducted to investigate women's approval of male IPV vs female IPV for each country. Table 5 presents the descriptive statistics and the paired sample t-test results. Results indicate that Sri Lankan women showed higher levels of approval for men's than women's use of minor physical IPV (t(194)=2.43, p= 0.01). Similarly, Sri Lankan women showed higher levels of approval for men's than women's use of severe physical IPV (t(192)=1.87 p=0.01). The opposite pattern was observed among New Zealand women who showed significantly lower levels of approval for men's use of minor physical perpetration than women's (t(198)=-8.30, p<0.001). Similarly, New Zealand women significantly approved of men's severe physical IPV less than women's (t(196)= -8.44, p<0.001). Together, the results show that women in Sri Lanka approved of men's use of physical IPV significantly more than female's, while women in New Zealand approved of female's use of physical IPV significantly more than men's. These results are consistent with hypothesis 2.

Table 5.

Women's approval of gendered physical IPV. Descriptive Statistics and Paired Sample t-test results.

	Approval of Men's use of Physical IPV			Approval of women's use of physical IPV			Difference's in approval levels for men's vs women's use of physical IPV		
Country	*N*	*M*	*(SD)*	*N*	*M*	*(SD)*	*t*	*p*	Cohen's *d*
Minor									
Sri Lankan	197	1.00	0.77	197	0.90	0.79	**2.43**	**0.01**	**0.13**
New Zealand	198	0.26	0.40	198	0.52	0.65	**-8.30**	**<0.001**	**0.48**
Severe									
Sri Lankan	197	0.76	0.79	197	0.69	0.73	**1.87**	**0.01**	**0.09**
New Zealand	198	0.06	0.21	198	0.23	0.36	**-8.44**	**<0.001**	**0.58**

Note. Possible scores on the BaRAS ranged from 0-4. Significant differences are shown in bold. Bonferroni adjusted *p*-value is significant at 0.0125 level.

Hypothesis 3. *Women residing in western countries (e.g., New Zealand) will express higher levels of benevolent sexism than women residing in non-western countries (e.g., Sri Lanka) who will express higher levels of hostile sexism.*

Independent sample t-tests were conducted to explore if there were significant differences in the levels of hostile and benevolent sexism held by women in Sri Lanka vs New Zealand. The Bonferroni correction procedure was applied, adjusting the alpha level of significance to 0.025. Table 6 presents the descriptive stats and the results of the independent sample t-tests. Inconsistent with hypothesis 3, the results show that that women in Sri Lanka endorsed benevolent sexism at a higher level than women in New Zealand ($t(391)= 23.07$,

p=<.001). As expected, women residing in Sri Lanka endorsed higher levels of hostile sexism when compared to women in New Zealand (*t*(387)= 8.50, *p*= <.001).

Table 6

Hostile Sexism and Benevolent Sexism scores reported by women in New Zealand and Sri Lanka: Descriptive Statistic and Independent Sample t-test results.

	Sri Lanka			New Zealand			**Between Country difference**		
Measures	*N*	*M*	*(SD)*	*N*	*M*	*(SD)*	*t*	*p*	Cohen's *d*
Benevolent Sexism	194	1.75	0.93	199	-0.38	0.89	**23.07**	**<.001**	**2.34**
Hostile Sexism	190	-0.01	1.10	199	-0.92	1.01	**8.50**	**<.001**	**0.86**

Note. Possible scores on the ASI ranged from -3 to 3. Statistically significant results are shown in bold. Bonferroni adjusted *p*-value is significant at 0.025 level.

Two paired sample t-tests were conducted to compare the levels of hostile and benevolent sexism scores held by women within each country. The Bonferroni correction procedure was applied resulting in an alpha level of 0.025. Table 7 presents the descriptive stats and the results of the paired sample t-tests. Results found that women in Sri Lanka expressed higher levels of benevolent than hostile sexism (*t*(189)=17.49, *p*<0.001), as did women in New Zealand (*t*(198)=8.08, *p*<.001). This shows that women across both countries endorse benevolent sexism at a higher level than hostile sexism.

Table 7

Descriptive Statistics and Paired Sample t-test results examining the level of Hostile Sexism vs Benevolent Sexism endorsed by women within each country.

	Benevolent Sexism			Hostile Sexism			**Country difference**		
Measures	*N*	*M*	*(SD)*	*N*	*M*	*(SD)*	*t*	*p*	Cohen's *d*
Sri Lanka	194	1.75	0.93	190	-0.01	1.10	**17.49**	**<0.001**	**1.73**
New Zealand	199	-0.38	0.89	199	-0.92	1.01	**8.08**	**<0.001**	**0.57**

Note. Possible scores on the ASI ranged from -3 to 3. Statistically significant results are shown in bold. Bonferroni adjusted *p*-value is significant at 0.025 level.

Hypothesis 4-7 (Mediation Models). Prior to running the moderated mediation models, we conducted Pearson's correlation to investigate whether the variables of interest are correlated. The results indicated that the majority of the variables were positively correlated (refer to Table 8). For example, there was a moderate positive correlation between minor perpetration and minor victimisation in the Sri Lankan sample (r =.74, p<.001) and a strong positive correlation between these variables in the New Zealand sample (r =.81, p< .001). The significant correlation between minor perpetration and minor victimisation found in both countries reflects the bidirectional nature of IPV. The data also found a small positive correlation between the approval of female perpetration (minor) and women's use of minor IPV in the Sri Lankan sample (r=.19, p< .001) as well as the New Zealand sample (r=.11, p<.05). This suggests that the approval of minor female IPV may facilitate women's use of physical violence against their partner. The data also indicated that there was a small positive correlation between benevolent sexism and approval of minor female IPV for both the Sri Lankan sample (r=.15, p<.05) and the New Zealand sample (r=.06, p<.05). Consistent with previous research, we also found a significant moderate positive correlation between hostile

and benevolent sexism for the New Zealand sample (r =.51, p < .001) and the Sri Lankan sample (r=.55, p <.001).

Given the positive correlation between hostile and benevolent sexism, we controlled for the effects of these variables when conducting the moderated mediation models. For example, we controlled for the effects of benevolent sexism when investigating the relationship between hostile sexism and IPV. Similarly, we controlled for the effects of hostile sexism when investigating the relationship between benevolent sexism and IPV.

Table 8.

Pearson's correlation for women's rates of IPV perpetration, victimisation, approval of IPV and sexism split by country.

Variables	1	2	3	4	5	6
1. Perpetration (minor)		.74**	.06	.19**	.01	.04
2.Victimisation (minor)	0.81**		.12	.14*	.02	.04
3).Approval of male violence (minor)	0.22**	.17		.70**	.07	-.03
4. Approval of female violence (minor)	0.11*	.07	.76**		.15*	.12
5. BS	0.16*	.09	.02	.06*		.55**
6. HS	0.19**	.07	.17*	.22**	51**	

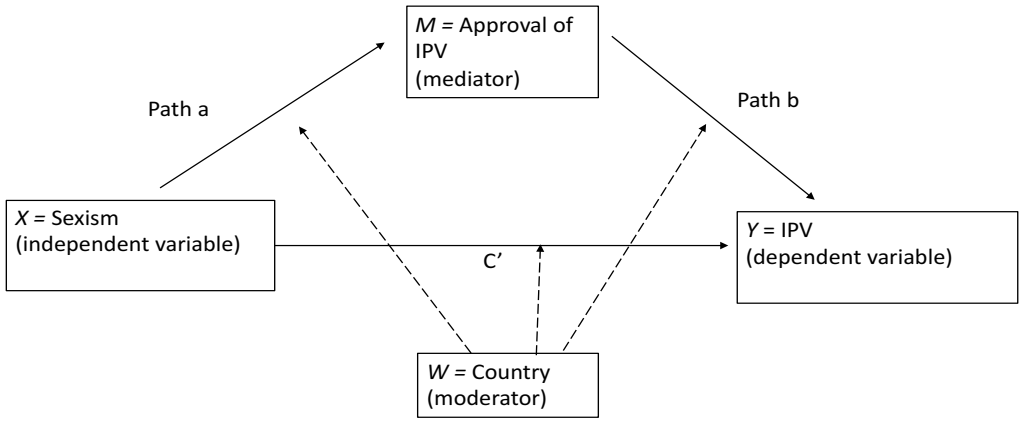
Note. Correlations for the Sri Lankan sample are presented above the diagonal while the correlations for the New Zealand sample are presented below the diagonal.
** p < .001, * p <.05.

Next, we examined whether the relationship between sexism and IPV is mediated by approval of IPV and whether the mediation models differ between New Zealand vs. Sri Lanka. For example, as shown in Figure 1, we investigated whether the mediational relationship (i.e., the indirect effect via *Paths a* and *b*) was moderated by country (variable *W*), while including the direct relationship (*c'*) between sexism and IPV. This was examined using moderated mediation, also known as conditional process analysis, using PROCESS macro for SPSS

(version 26.0), Model 59 (Hayes, 2013). Based on the descriptive data, it was decided to focus our analysis on the *minor* perpetration and *minor* victimisation of physical IPV. This was because the rates of severe perpetration and severe victimisation was so close to zero that there would be no variance to predict using the mediation model. Furthermore, when conducting the moderated mediation models, we made sure to control for the effects of hostile sexism and benevolent sexism on each other since these variables were positively correlated.

Figure 4

Example of a moderated mediation model showing paths a, b and c'.



Hypothesis 4. *Women who endorse higher levels of benevolent sexism towards their own gender will report using physical IPV more frequently against men, mediated by higher levels of approval of physical IPV towards men.*

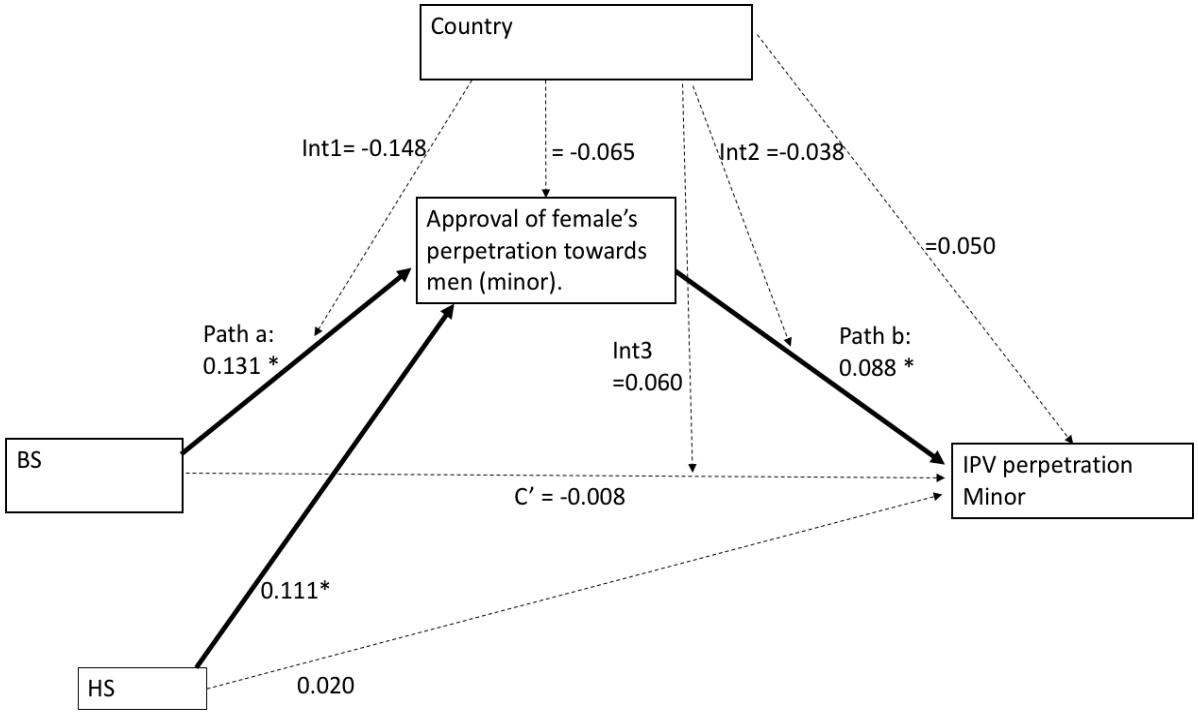
We investigated whether women's endorsement of benevolent sexism was linked with greater perpetration of minor physical IPV, mediated by relatively greater approval of physical IPV toward men, and whether this mediation effect differed between Sri Lanka and New

Zealand. Benevolent sexism was entered into the regression model as a predictor of IPV perpetration (minor), mediated by approval of female IPV perpetration towards men (minor), including endorsement of hostile sexism and country (coded [1] = Sri Lanka, [2] = New Zealand) as covariates. The regression model included a benevolent sexism × country interaction (testing the extent to which country moderated path a), and an approval of physical IPV toward men × country interaction (testing the extent to country moderated path b).

Results from the moderated mediation model are displayed in Table 9 and Figure 5. Consistent with hypothesis 4 the results indicated that women's endorsement of benevolent sexism predicted greater approval of female IPV. In turn, as predicted, women's approval of female IPV significantly predicted women's self-reported IPV toward their male partners. Although the approval of female IPV and benevolent sexism were higher in Sri Lanka than in New Zealand in general, there was no evidence that participants' country moderated the relationship between benevolent sexism and approval of female perpetration, or between approval of female perpetration and IPV perpetration (see non-significant interaction effects in Table 9). Thus, there was no evidence that any resulting indirect effect would differ between Sri Lanka and New Zealand, providing no support for hypothesis 7 which hypothesised that the mediation models would be stronger in New Zealand than Sri Lanka. Accordingly, we estimated the indirect effect in an equivalent model that pooled model parameters across samples (using PROCESS Model 4), while still including country as a covariate in the model. The results supported hypothesis 4 as the indirect effect was significant, suggesting that approval of female perpetration mediated the relationship between benevolent sexism and IPV perpetration among women (*indirect effect* = .007, *SE* =.004, 95% CI = .001 to .018).

Figure 5.

Results for the moderated mediation model for Hypothesis 4



Note. The solid lines show significant paths. * indicates significant results at the $p < .05$ level. ** indicates significant results at the $p < .001$ level.

Table 9. *Results for Moderated Mediation Analysis for Hypothesis 4.*

Paths	*B*	*SE*	95% Confidence interval (CI) [low, high]		*t*	*p*
(C')	-0.008	0.027	-0.061	0.045	-0.300	0.765
(Path a)	**0.131**	**0.055**	**0.023**	**0.239**	**2.386**	**0.018**
(Path b)	**0.088**	**0 .033**	**0.023**	**0.153**	**2.659**	**0.008**
The effects of country (Int1)	0.148	0.080	-0.306	0.010	-1.848	0.065
The effect of country (Int 2)	-0.038	0.050	-0.135	0.060	-0.757	0.500
The effect of country (Int 3)	0.060	0.039	-0.018	0.137	1.518	0.130
Country on Approval of Female IPV	-0.065	0.122	-0.306	0.175	-0.534	0.594
Country on IPV perpetration	0.050	0.067	-0.081	-0.181	0.749	0.454

Note. Significant differences are shown in bold.

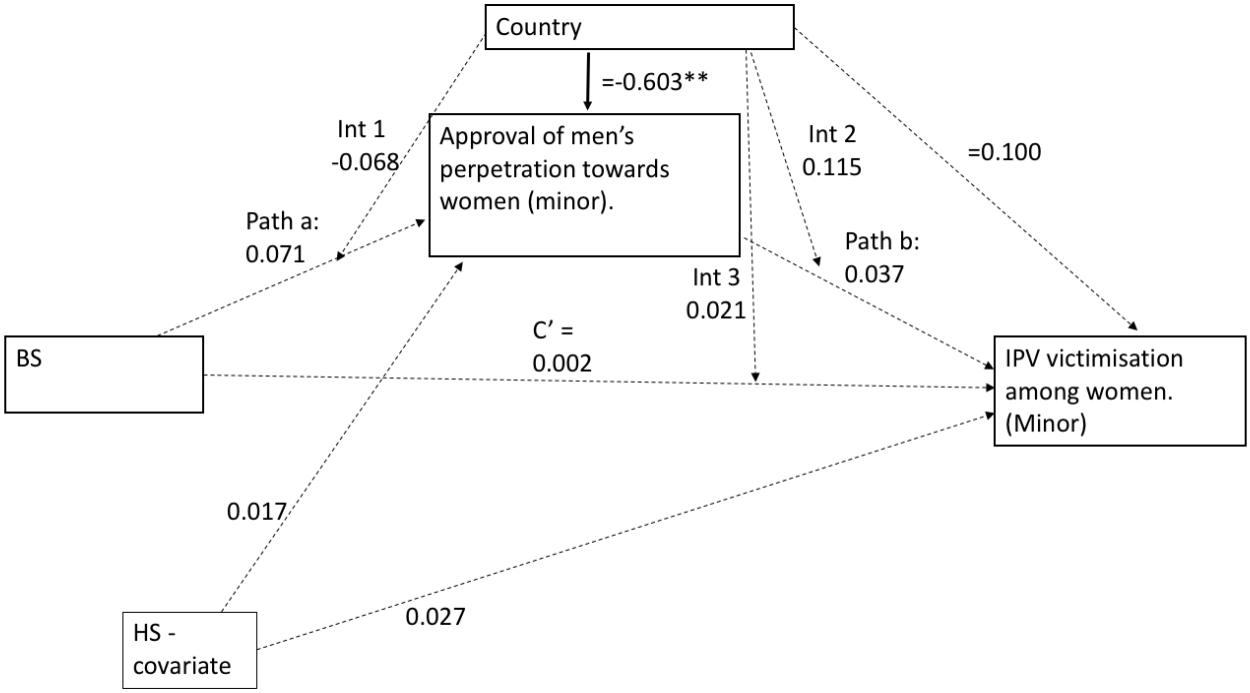
Hypothesis 5. *Women who endorse higher levels of benevolent sexism towards their own gender will report lower rates of IPV victimisation, mediated by lower levels of approval of physical IPV towards women.*

We examined whether women's endorsement of benevolent sexism was linked with lower IPV victimisation among women, mediated by lower levels of approval of physical IPV used by men, and whether this mediation differed between the two countries (Sri Lanka vs. New Zealand). Benevolent sexism was entered into the regression model as the predictor of IPV victimisation (minor), mediated by approval of male perpetration (minor). Lastly, endorsement of hostile sexism and country (coded [1] = Sri Lanka, [2] = New Zealand) were entered into the regression model as covariates.

Results from the moderated mediation model are displayed in Table 10 and Figure 6. The results indicated that there was no significant relationship between benevolent sexism and approval of men's perpetration towards women suggesting that path a was not significant. Similarly, there was no significant relationship between approval of men's perpetration and IPV victimisation among women, suggesting that path b was non-significant. We measured the indirect effect using PROCESS Model 4 which found that there was no significant indirect effect, suggesting that there is no mediation effect (*indirect effect* =.007, *SE*=.006, 95% CI= -.002 to .020). The non-significant indirect effect was inconsistent with hypothesis 5 which hypothesised that attitudes towards men's perpetration would predict the relationship between benevolent sexism and IPV victimisation. Although women in Sri Lanka were more approving of men's IPV, country had no effect on path a or b of the model which were both insignificant, providing no support hypothesis 7 which hypothesised that the mediation model would be stronger in New Zealand than Sri Lanka.

Figure 6.

Results for the moderated mediation model for Hypothesis 5.



Note. The solid lines show significant paths. * indicates significant results at the $p < .05$ level. ** indicates significant results at the $p < .001$ level.

Table 10.

Results for the moderated mediation model for Hypothesis 5.

Paths	*B*	*SE*	95% Confidence Interval [low high]		*t*	*p*
C’	0.015	0.025	-0.048	0.051	0.059	0.953
Path a	0.071	0.047	-0.021	0.163	1.518	0.130
Path b	0.037	0.032	-0.025	0.099	1.173	0.242
The effects of country (Int1)	-0.068	0.069	-0.202	0.067	-0.987	0.324
The effects of country (Int2)	0.115	0.065	-0.014	0.244	1.758	0.080
The effects of country (Int3)	0.021	0.037	-0.051	0.094	0.573	0.567
Country on Approval of Male IPV	**-0.603**	**0.104**	**-0.809**	**-0.398**	**-5.781**	**<.001**
Country on IPV victimisation	0.100	0.065	0.028	.228	1.543	0.124

Note. Significant differences are shown in bold.

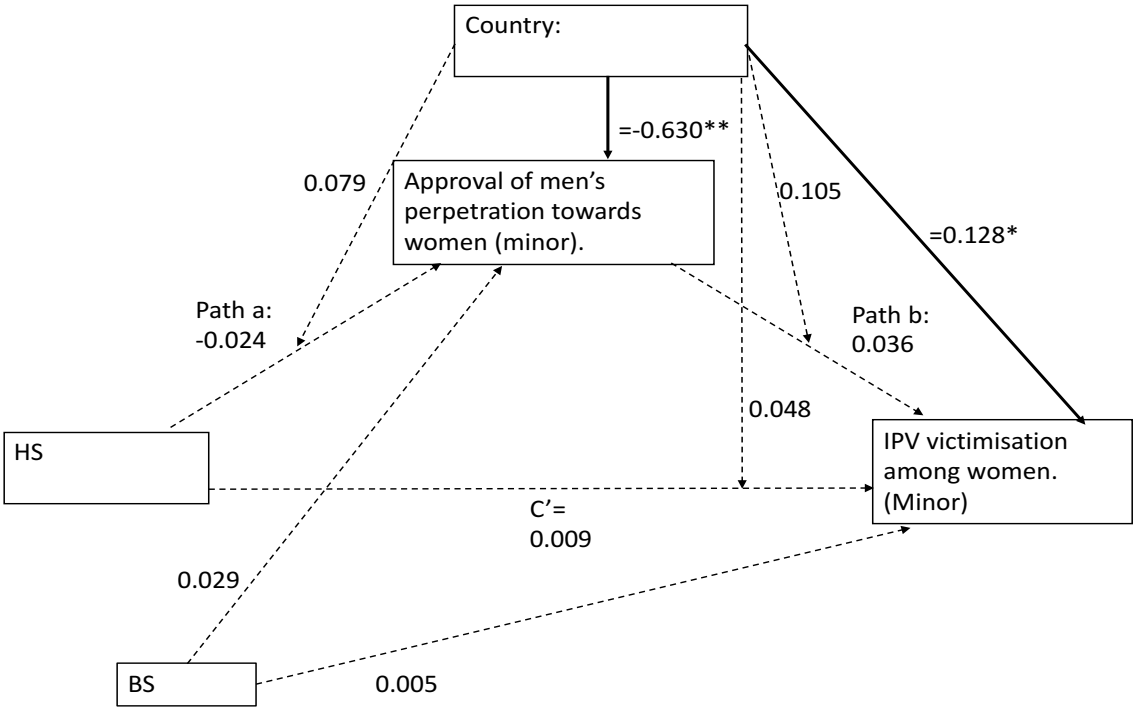
Hypothesis 6. *Women who endorse higher levels of hostile sexism towards their own gender will report higher rates of IPV victimisation, mediated by greater approval of physical IPV towards women.*

We examined whether women's endorsement of hostile sexism was linked with greater IPV victimisation among women, mediated by relatively greater levels of approval of men's use of physical IPV, and whether this mediation model differed between New Zealand and Sri Lanka. Hostile sexism was entered into the regression model as the predictor variable of IPV victimisation (minor), mediated by approval of men's use of physical IPV (minor). Furthermore, the endorsement of benevolent sexism and country (coded [1] = Sri Lanka, [2] = New Zealand) were entered as covariates.

Results from the moderated mediation model are displayed in Table 11 and Figure 7. Inconsistent with hypothesis 6, the results indicated that hostile sexism did not significantly predict approval of men's use of IPV towards women. Also inconsistent with the hypothesis 6, approval of men's use of IPV did not significantly predict IPV victimisation among women. Given the non-significant path a and b, the indirect effect was also insignificant (*indirect effect* =.0009, *SE* =.0015, 95% CI= -.002 to .004). These results are inconsistent with hypothesis 6 which hypothesised that attitudes condoning men's use of violence towards women will mediate the relationship between hostile sexism and IPV victimisation for women.

Figure 7.

Results for the moderated mediation model for Hypothesis 6:



Note. The solid lines show significant paths. * indicates significant results at the $p < .05$ level. ** indicates significant results at the $p < .001$ level.

Table 11.

Results for the moderated mediation model for Hypothesis 6.

Paths	*B*	*SE*	95% Confidence Interval [low high]		*t*	*p*
C’	0.009	0.021	-0.033	0.051	0.406	0.685
Path a	-0.024	0.040	-0.102	0.054	-0.606	0.545
Paths b	0.036	0.032	-0.026	0.098	1.138	0.256
The effects of country (Int1)	0.079	0.060	-0.038	0.196	1.332	0.184
The effects of country (Int2)	0.105	0.066	-0.024	0.234	1.598	0.111
The effects of country (Int3)	0.048	0.032	-0.016	0.111	1.487	0.138
Country on Approval of Male IPV	**0.630**	**0.095**	**-0.816**	**-0.444**	**-6.664**	**<.001**
Country on IPV victimisation	**0.128**	**0.061**	**0.008**	**0.248**	**2.090**	**0.037**

Note. Significant differences are shown in bold.

Discussion

The Revised Gender Symmetry Theory (Archer, 2018) proposes that western countries with higher levels of gender empowerment of women will experience an equal rate of physical intimate partner violence (IPV) between men and women that is bi-directional and low in intensity. Non-gendered theories of aggression are proposed to better explain high rates of bi-directional IPV in western countries. The Revised Gender Symmetry Theory also proposes that, in contrast, non-western countries with lower levels of gender empowerment will experience high rates of male to female aggression and that bi-directional violence or male victimisation from women will be unlikely. Gendered theory (Dobash & Dobash, 1979) is therefore thought to best explain IPV in countries characterised by low gender empowerment of women. Given that the majority of family violence research has been completed in western countries, the accuracy of the Revised Gender Symmetry Theory remains untested.

To address this gap, this study first tests the validity of the Revised Gender Symmetry Theory (Archer, 2018) using self-reports of IPV perpetration and victimisation from women residing in two countries above (New Zealand) and below (Sri Lanka) the mean global gender empowerment score. A focus is placed on exploring younger female experiences of IPV since rates of IPV in student populations is shown to be high (Stratus, 2008; Archer 2000) and limited research including women exists, particularly in developing countries such as Sri Lanka. In addition, considering the strong relationship between positive attitudes towards IPV with both sexism and IPV perpetration, the mediational properties of positive attitudes in explaining the relationship between sexism and IPV perpetration and victimisation in the two countries was examined.

Specifically, seven hypotheses were explored. Hypothesis 1 tested the accuracy of Archer (2018) Revised Gender Symmetry Theory by exploring the rates of minor and severe physical IPV experienced and perpetrated by women in New Zealand vs. Sri Lanka. Secondly,

we examined whether there were significant differences between New Zealand and Sri Lankan women in their approval of IPV used by men and women in intimate relationships. Thirdly, we investigated whether women residing in these two countries endorsed different levels of hostile and benevolent sexism. Lastly, we examined whether approval of IPV mediated the relationship between sexism and IPV victimisation and perpetration for women residing in Sri Lanka and New Zealand. The following will provide a summary of the results, followed by a discussion of the findings and its implication for clinical practice.

Hypothesis 1: *Women residing in the country with low gender empowerment of women (Sri Lanka) will report higher rates of victimisation from men, and lower rates of IPV perpetration, than women residing in the country with higher gender empowerment of women (New Zealand) which should show bidirectional IPV at equal rates.*

Between country analysis: Inconsistent with hypothesis 1, the results found that women in New Zealand and Sri Lanka reported similar rates of IPV perpetration and victimisation for both minor and severe forms of physical IPV. This demonstrates that women living in patriarchal countries with low gender empowerment of women use physical violence against their male partner to the same extent as women residing in western countries with greater gender empowerment of women. This is seen even for severe forms of physical IPV which include acts such as choking, kicking, beating and using weaponry against the partner (Straus et al., 1996). These results challenge the validity of the Revised Gender Symmetry Theory (Archer, 2018) which assumes that women residing in countries with lower gender empowerment of women would be unlikely to use physical violence against their male partner. The results are also inconsistent with the Gendered Theory which suggests that women are often the victims of IPV at the hands of men (Dobash & Dobash, 1979, Dobash & Dobash, 2004). Instead, it was found that women do use violence against their partner, demonstrating

that IPV is a gender-inclusive problem affecting *both* men and women (Archer, 2000a, 2002; Bates et al. 2014; Straus, 2004, 2008; Black et al., 2011).

Within country analysis. Within country analysis was conducted to investigate whether there were significant differences between the rates of IPV perpetration and victimisation reported by women for each country. Inconsistent with hypothesis 1, women residing in Sri Lanka were more likely to report using minor IPV against their partner within the past 12months than they were to report experiencing minor forms of IPV from their partner. This suggests that Sri Lankan women, when compared to men, are more likely to use minor forms of IPV such as slapping, grabbing or pushing/shoving their partner. These results further challenge the Revised Gender Symmetry Theory (Archer, 2018), which suggests that female IPV, even at low levels of intensity, is unlikely to be observed in societies that have low gender empowerment of women. However, when it came to severe forms of physical IPV, Sri Lankan women were more likely to be victims than perpetrators. Since severe IPV includes acts such as being choked, strangled or kicked, Sri Lankan women may be at greater risk of injury when compared to their male partner. For New Zealand women, there was no significant difference between IPV perpetration and victimisation for either minor or severe forms of IPV. This indicates patterns of gender symmetry regardless of severity levels. Taken together, the results show that IPV perpetration is enacted by *both* men and women across two countries with high and low gender empowerment of women. The results do not find support for hypothesis 1 as women residing in countries with lower gender empowerment of women such as Sri Lanka engage in minor IPV perpetration at equal rates to men while women in New Zealand engage in IPV at equal rates to men for both minor and severe forms of IPV.

Previous research by Darko et al. (2018); Ndoromo et al. (2018) and Esquivel-Santoveña (2013) has also reported IPV perpetration among women in countries with low gender empowerment of women. For example, in Darko et al. (2018)'s study, women residing

in patriarchal societies such as Ghana (Africa) were more likely to be perpetrators of minor physical aggression, indirect verbal, non-verbal and cyber aggression against their intimate partner when compared to men. Patterns of gender symmetry were found in Ndoromo et al (2018)'s study in which women and men in South Sudan (Africa) showed equal rates of IPV perpetration across five aggression types, which included minor physical IPV. Similarly, Esquivel-Santoveña (2013) has found that women in patriarchal countries such as Mexico perpetrated minor and severe physical IPV at an equal or slightly higher frequency when compared to men. These findings, together with the findings of the current study challenge the validity of the Revised Gender Symmetry Theory (Archer, 2018) which assumes that male victimisation from women would be unlikely in patriarchal contexts. As Darko et al. (2018) suggested, the Revised Gender Symmetry Theory may need to be revised to account for the female IPV seen in patriarchal countries.

There are several possible explanations for the presence of female IPV among low gender empowerment countries such as Sri Lanka. Firstly, the women in the current study were recruited from university settings. Previous research has suggested that higher education levels among women in developing countries are associated with greater IPV perpetration towards men (Darko et al., 2018). For example, in Darko et al. (2018)'s study, higher levels of education were associated with women's perpetration of physical, indirect, nonverbal and cyber IPV. Greater educational levels may increase women's sense of empowerment, which in turn, may facilitate their use of IPV towards men (Darko et al., 2018). For example, education may increase women's empowerment through greater access to resources, autonomy, knowledge and social support (Jewkes, 2002). Consistent with this idea, Levinson (1989) has found that women who had more power outside of the home through their involvement in female-work groups were more likely to use violence against their partners. The authors suggested that female-work groups may increase women's sense of empowerment through access to social

support and economic resources (Levinson, 1989). Taken together, the results of the current study and previous research, suggests that higher empowerment of women through education or employment may facilitate women's use of IPV.

The current study also predominantly included those in dating relationships. This focus on dating violence could have influenced the rates of IPV reported by Sri Lankan women. Firstly, the majority of the Sri Lankan women in our study were not cohabiting with their partners. This is consistent with the traditional Buddhist norms which discourage cohabiting outside of marriage (Department of Census and Statistics, 2007). Instead, unmarried women in South Asian countries are often expected to live under the protection of their family who provide them with financial resources and security (Jordal, Wijewardena, & Olsson, 2013; Subramaniam & Sivayogan). This financial security provided by their family may enable women to use physical violence towards their partner since they do not have to fear rejection from their partner. This could lead to higher rates of IPV reported in the current study. Secondly, women in dating relationships may experience lower levels of IPV victimisation since they have more freedom to leave abusive relationships when compared to married women (Subramaniam & Sivayogan, 2001; Perera, 1990). For example, married women in Sri Lanka may remain in abusive relationships because divorce brings social stigma to women (Jayasuriya, Wijewardena & Pia Axemo, 2011; Haj-Yahia & De Zoysa, 2007). When children are involved, women often tolerate IPV for the welfare of their children (Subramaniam & Sivayogan, 2001; Perera, 1990). However, women in dating relationships may not have such restrictions due to marriage, which could allow them to leave their abusive partners. Taken together, the focus on dating violence could have influenced the rates of IPV reported in the current study. Future research should also aim to investigate IPV among married women in Sri Lanka.

Although women residing in Sri Lanka reported higher rates of minor IPV perpetration than victimisation, it is important to acknowledge that this trend does not hold for severe forms of physical IPV. Instead, for severe IPV, Sri Lankan women were more likely to be victims than perpetrators. The higher rates of severe IPV experienced by Sri Lankan women could be a reflection of the patriarchy which prevails within society. For example, the patriarchal norms which prevail in non-western countries (Archer, 2006) may enable physical violence towards women to escalate to severe forms of IPV. Furthermore, men may use severe IPV as a method to punish their female partners if they violate social norms (e.g., if the female partner uses minor IPV against them) or to regain power and dominance over their female partner (Courtenay, 2000). On the other hand, women in Sri Lanka may be less likely to use severe IPV against their male partner as this may put them in a greater risk of serious injury. For instance, women's smaller size and strength will increase their risk of injury if the partner retaliates using severe IPV. Furthermore, the patriarchal norms which prevail in Sri Lanka may discourage and inhibit women's use of severe IPV against men. As a result, women may be more inclined to remain passive in the context of severe IPV from their partner. For example, using a sample of 417 Sri Lankan women, Subramaniam and Sivayogan (2001) have shown that approximately 50% of women remain passive when experiencing severe forms of IPV such as being physically beaten, while 10% of the women leave the husband temporarily. Taken together, women in Sri Lanka were more likely to be victims than perpetrators of severe IPV. The higher rates of severe victimisation found among Sri Lankan women is concerning because it may lead to physical injury and poor mental health outcomes (Coker et al., 2002; Campbell, 2002).

For women residing in New Zealand, there were no significant differences between the rates of IPV victimisation vs. perpetration for both minor and severe forms of IPV. This suggests that men and women in New Zealand engage in physical IPV at equal rates (e.g.,

gender symmetry). These results are consistent with the data reported by the New Zealand Crime and Safety Survey (2014) which has found no significant differences for men and women in the rates of physical offences, threats and damage offences committed against an intimate partner (Ministry of Justice, 2015). Similarly, using a sample of 437 women and 391 men from New Zealand, Fergusson, Horwood, and Ridder (2005) has found that men and women reported similar rates of victimisation while women reported slightly higher rates of perpetration when compared to men. Previous research conducted in western countries has also reported gender symmetry, or slightly higher female-to-male aggression (Archer, 2000; Desmarais et al., 2012a; Archer, 2002). This bidirectional nature of IPV applies to both minor as well as severe IPV (Archer, 2002). For example, Archer (2002) reported that men and women used acts classified as severe physical aggression at equal rates to men, although those acts qualitatively differed, with men being more likely to beat up and to choke or strangle their partner while women were more likely to throw something at their partner, kick, bite, punch, and hit their partner with an object. However, there was no significant difference in the rates at which men and women used a knife or gun against their intimate partner (Archer, 2002). The lower levels of patriarchal gender norms in western countries, as well as the general tendency to trivialise female IPV, may facilitate women's use of IPV against their partner (Felson, 2002; Fiebert & Gonzalez, 1997). Taken together, the findings of the current study suggest that physical IPV is a significant problem which affects *both* women and men in countries with low and high gender empowerment of women.

Hypothesis 2: *Women residing in the country with greater gender empowerment of women (New Zealand) will display greater approval for female IPV when compared to women residing in the country with lower gender empowerment of women (Sri Lanka) which should show greater approval for men's use of violence towards women than vice versa.*

Inconsistent with hypothesis 2, the results showed that women residing in Sri Lanka approved of minor and severe IPV used by either gender to a greater extent than women residing in New Zealand. Within country comparisons found that Sri Lankan women were more accepting of male IPV when compared to female IPV for both minor and severe forms, whereas women in New Zealand were more approving of female IPV when compared to male IPV for both minor and severe forms of physical IPV.

Women in Sri Lanka may be more approving of IPV because violence is often normalised in Sri Lanka. For example, Sri Lankan civilians are exposed to high rates of violence through the exposure to the recent civil war (1983-2009), high levels of militarisation, police brutality, community crime and corporal punishment (De Silva, 2001; De Zoysa, Newcombe and Rajapakse, 2006; World Organisation Against Torture, 2004). Furthermore, university students are often exposed to violence through the ritual of "ragging" where undergraduate university students are exposed to physical and/or sexual abuse, humiliation, or harassment by senior students (Navaz, 2020; Premadasa, Wanigasooriya, Thalib & Ellepola, 2011). Such exposure to violence may normalise violence and alter people's attitudes and beliefs about violence. For example, those who are exposed to violence in their everyday life may approve of violence as an effective and justifiable way of solving problems (Bonta & Andrews, 2015). Taken together, women in Sri Lanka may be more likely to approve of violence used in intimate relationships by both men and women since violence is often is often normalised in wider Sri Lankan society.

The finding that women in Sri Lanka are more likely to approve of men's IPV when compared to female IPV is expected given the patriarchal norms which prevail in Sri Lanka (Jayasuriya, Wijewardena, & Axemo, 2011; Vithanage, 2015). Previous research by Jayasuriya et al. (2011) has found that over 50% of Sri Lankan women aged between 18 to 49 years' believed that the husband has the right to abuse their wife under the following circumstances: disobedience, refuse sex, ask him about his affairs with other women or if there is suspected infidelity. Furthermore, majority of the women surveyed believed that it is important for men should show their wife that they are the "boss", whereas women were expected to be "good" wives to their husbands (Jayasuriya et al., 2011). Such gendered expectations may set up attitudes which allow men to use violence over their partner to maintain power and authority in the relationship (Dobash & Dobash, 1988, 2004). The authors suggested that these attitudes which approve of male IPV may have been shaped through the patriarchal norms which prevail in Sri Lanka (Jayasuriya et al., 2011). Such attitudes condoning male IPV may increase the risk of IPV victimisation for women because it encourages women to remain in abusive relationships (Jayatilleke, Poudel, Junko Yasuoka, Jayatilleke, & Jimba, 2011).

New Zealand women approving of female IPV more than male IPV, for both minor and severe forms, is consistent with the previous research in western countries (Fiebert & Gonzalez, 1997; Miller & Simpson, 1991; Sorenson & Taylor, 2005). For example, using a sample of 3,769 adults residing in California (USA), Sorenson and Taylor (2005) have found that violence perpetrated by men towards their female partner is viewed as more severe than women's use of IPV towards men. Furthermore, the participants in this study were less likely to view female IPV as "illegal" and in need of formal interventions such as arrest when compared to male IPV (Sorenson &Taylor, 2005). Similarly, Simon et al. (2001) found that male and female university students from the U.S were more likely to tolerate women hitting their male partner than vice versa. Furthermore, the participants in the study were more likely

to approve of female hitting their partner in the event of self-defence, for the purpose of discipline or for "keeping the partner in line" (Simon et al., 2001). This suggests that men and women in western countries are more likely to approve of female IPV under a range of different circumstances when compared to male IPV.

Benevolent sexist attitudes which prevail in western countries such as New Zealand may be associated with greater approval towards female IPV. According to Glick and Fiske (1996), benevolent sexism portrays women as the "weaker sex" who needs to be cherished and protected by men. As a result, men's violence is viewed more negatively (Straus et al., 1997) while women's IPV is considered trivial, inconsequential and therefore more acceptable. This idea is illustrated in Fiebert and Gonzalez (1997)'s study in which approximately 38% of the women who used physical violence towards their male partner held the belief that "my actions would not hurt my partner" while 24% of the women believed that "men can readily protect themselves" from the violence perpetrated by females. This suggests that the higher rates of approval towards female IPV found in the New Zealand women could be a reflection of benevolent sexist attitudes which prevail in western countries (Felson, 2002).

Hypothesis 3. *Women residing in western countries (e.g., New Zealand) will express higher levels of benevolent sexism than women residing in non-western countries (e.g., Sri Lanka) who will express higher levels of hostile sexism.*

Inconsistent with hypothesis 3, results found that Sri Lankan women endorsed higher levels of hostile *and* benevolent sexism when compared to New Zealand women. Within country analysis showed that women in Sri Lanka and New Zealand were more accepting of benevolent sexism than hostile sexism. Furthermore, the results showed that benevolent sexism and hostile sexism were positively correlated with each other, suggesting that these two variables are complementary forms of sexism (Glick & Fiske, 1996).

The results are consistent with Glick et al. (2000)'s study which investigated hostile and benevolent sexism among 15,000 men and women in 19 nations. The results showed an inverse relationship between sexism and the gender empowerment of the country in which hostile and benevolent sexism was the highest among patriarchal countries such as Cuba, Nigeria and South Africa when compared to more egalitarian countries such as Australia, England and Belgium. Together, such findings suggest that women in patriarchal countries endorse sexist beliefs to a greater extent than women from countries with higher gender empowerment of women. The authors suggested that women in patriarchal countries may endorse benevolent sexism as a method of gaining men's protection, affection and avoiding hostile sexism (Glick et al., 2000). The protective role of benevolent sexism for women is further illustrated by experimental research which has found that women are more likely to endorse benevolent sexism when they are led to believe that men hold hostile views about women (Fischer, 2006). Given the gender inequality and the patriarchal norms which prevail in Sri Lanka (Vithanage, 2015; Global Gender-gap Report, 2018), women may be motivated to embrace benevolent sexism as a method of protecting themselves against hostility from men (Glick & Fiske, 1996; Fisher, 2006). In contrast to Sri Lanka, New Zealand has greater gender equality between men and women (Global Gender-gap Report, 2018). As a result, women in New Zealand may not need to adopt benevolent sexism to protect themselves against hostility from men. This may reflect the lower levels of benevolent sexism found among women in New Zealand when compared to Sri Lanka. Furthermore, women in developed countries such as New Zealand may be more inclined to view benevolent sexism as sexist and reject it, along with hostile sexism when compared to women in Sri Lanka who may view benevolent sexism as positive and beneficial. Taken together, the results of our study suggests that women in countries with low gender empowerment of women are more likely to hold higher levels of benevolent sexism than women in western countries, providing no support for hypothesis 3.

Although benevolent sexism plays a protective role for women in patriarchal countries, it nevertheless maintains gender inequality because women would be less likely to challenge the patriarchal norms and reach gender equality (Glick et al. 2000; 2004; Jost and Banaji 1994).

The benevolent sexism found among Sri Lankan women may also increase women's endorsement of hostile sexism through the process of system-justification (Glick and Fiske's, 2001b; Sibley & Nickola C. Overall & John Duckitt, 2007). According to this view, the exposure to benevolent sexist content increases the extent to which women believe that society is fair and just (Jost & Kay, 2005). This is because benevolent sexism idealises women and provides them with "rewards" (e.g., protection from harm) if they conform to conventional sex roles (Glick and Fiske 1996). As a result, women who endorse benevolent sexist beliefs may show greater hostility and negative evaluation towards women who are perceived as undermining the social system by refusing to conform to traditional gender roles (Glick and Fiske 1996; Sibley et al., 2007). For example, Abrams et al. (2003)'s study has found that women endorsing higher levels of benevolent sexism were more likely to allocate greater responsibility and blame to female rape survivors if they are perceived as not conforming to traditional gender norms (e.g., by kissing the perpetrator earlier that night). Furthermore, using a longitudinal design, Sibley et al. (2007) explored the system justifying effect of women's benevolent sexist beliefs, finding that women's endorsement of benevolent sexism was associated with greater levels of hostile sexist attitudes toward their gender over time. These results suggest that women's endorsement of benevolent and hostile sexism is positively correlated, whereby increases in benevolent sexism leads to greater hostile sexism (Glick & Fiske, 1996). Given that women in Sri Lanka endorse higher levels of benevolent sexism when compared to New Zealand women, the rates of hostile sexism would also be greater in the Sri Lankan sample.

Lastly, it is important to acknowledge that women in both New Zealand and Sri Lanka were more likely to endorse benevolent sexism when compared to hostile sexism. This is consistent with Glick et al. (2000)'s study who reported that women across 19 countries were more likely to reject hostile sexism when compared to benevolent sexism. The authors suggested that benevolent sexism is more favourable among women because it has the advantage of protecting women from harm when compared to hostile sexism which portrays negative attitudes towards women (Glick et al., 2000; Glick and Fiske 1996). Our results, in addition to Glick et al. (2000), shows that women across western and patriarchal countries are more likely to endorse benevolent sexism than hostile sexism. These results question the validity of Felson's Chivalry Theory (Felson, 2002) which suggests that chivalry/benevolent norms would prevail in western societies, but not in non-western countries, which would show higher rates of patriarchy. Instead, the current findings demonstrate that women in western and patriarchal countries endorse benevolent sexism to a greater extent than hostile sexism.

Hypotheses 4-7: These hypotheses set out to test whether approval of IPV mediates the relationship between sexism and IPV in heterosexual relationships in New Zealand and Sri Lanka, and if the mediation model differ between countries.

Moderated mediation models were developed to investigate whether approval of IPV mediated the relationship between sexism and IPV. Based on the descriptive data, the decision was made to focus the analysis on *minor* perpetration and *minor* victimisation. This was because the rates of severe IPV was so close to zero that there would be no variance to predict using the mediation models. The following will discuss the mediation models for minor victimisation and minor perpetration.

Consistent with hypothesis 4, the results found that women's endorsement of benevolent sexism was *indirectly* related to IPV perpetration through the approval of female IPV. This was seen for women residing in New Zealand and Sri Lanka. This suggests that

women who endorsed higher levels of benevolent sexism were more approving of women's use of IPV towards men, which in turn, led to IPV perpetration towards men. The non-significant direct effect found between women's endorsement of benevolent sexism and IPV perpetration suggests that benevolent sexism, alone, does not predict IPV perpetration, but it does indirectly through the approval of female IPV. These results are consistent with previous research conducted with men which have shown that attitudes supporting violence, rather than the endorsement of patriarchal values, increased men's use of IPV (Bates et al., 2013; Sugarman & Frankel, 1996). Overall, the results from the current study suggest that attitudes condoning female IPV and benevolent sexism are risk factors for IPV perpetration among women in New Zealand and Sri Lanka. Our study also investigated whether attitudes condoning male IPV mediates the relationship between hostile sexism and IPV victimisation or the relationship between benevolent sexism and IPV victimisation. Inconsistent with hypothesis 5 and 6, there was no significant mediation found for these variables. For example, there was no significant direct or indirect relationship found between hostile sexism and IPV victimisation or between benevolent sexism and IPV victimisation. These results suggest that women's attitudes about male IPV do not influence their victimisation rates. Although more research is needed, this suggests that interventions aimed at targeting women's attitudes about male IPV will not be effective at reducing female victimisation. Taken together, only one of our mediation models was significant, finding that benevolent sexism was indirectly associated with IPV perpetration through attitudes which condone female IPV for women in two countries which are above and below the mean global gender empowerment score. The mediation model did not differ between New Zealand and Sri Lanka, providing no support for hypothesis 7 which predicted the mediation model to be stronger for New Zealand than Sri Lanka.

The significant relationship between benevolent sexism and approval of female IPV found in the current study is consistent with previous research. Benevolent sexism is associated

with the view that women are "weak" when compared to men (Glick & Fiske, 1996) and, therefore, women's use of IPV towards men may be perceived as trivial, non-injurious and more acceptable (Fiebert & Gonzalez, 1997). For example, using a sample of 192 university students, Seelau and Seelau (2005) has found that participants were more likely to perceive IPV perpetrated by men as more serious, threatening and capable of causing injury than IPV perpetrated by women (Seelau & Seelau, 2005). The authors suggested that gendered stereotypes in which women are perceived as "weak and vulnerable" may be associated with the perception that female IPV is less harmful than male IPV (Seelau &Seelau, 2005). Such gendered stereotypes may, therefore, condone female IPV and facilitate women's use of violence towards men (Fiebert & Gonzalez, 1997). The results of the current study extend the previous research by demonstrating that women's endorsement of benevolent sexism alone does not predict their IPV perpetration. Instead, benevolent sexism is *indirectly* associated with IPV perpetration *through* attitudes which condone female IPV. Interventions aiming to reduce female IPV should therefore target both benevolent sexism and attitudes condoning female IPV.

The significant relationship between attitudes condoning female IPV and IPV perpetration seen in the current study is consistent with previous research. For example, previous research has shown that attitudes condoning IPV increases the likelihood of IPV perpetration among both men and women (Stith, Smith, Penn, Ward & Tritt's, 2004; A'Court, 2020; Dibble & Straus, 1980). Using a sample of 2,143 male and female participants, Dibble and Straus (1980) have found that approximately 28% of the participants believed that using physical IPV such as slapping was good, normal and necessary (Dibble & Straus, 1980). Of those participants who condoned IPV, one third reported using violence against a partner. This demonstrates the significant relationship between acceptance of IPV and the use of IPV. Our results, in addition to the previous research, suggests that attitudes supporting IPV is a risk

factor for IPV perpetration among both men and women (Stith et al., 2004; A'Court, 2020; Dibble & Straus, 1980).

A'Court (2020) is one of the only studies to date to examine whether attitudes condoning IPV mediates the relationship between sexism and physical IPV perpetration among heterosexual men and women. The study included a sample of men (*N*=322) and women (*N*=356) aged between 18-90 years (*M*=36.78years) from Canada and the United States of America (USA). The results found that for both men and women, attitudes condoning the use of IPV mediated the relationship between sexism and IPV perpetration. For example, for both genders, hostile sexism was associated with higher levels of IPV perpetration through increased approval of male IPV. Furthermore, higher levels of benevolent sexism among women, but not men, was associated with greater IPV perpetration through increased approval of *male IPV*. Although our results differed in the sense that benevolent sexism was associated with greater IPV perpetration through the approval of *female IPV* rather than the approval of male IPV, both studies found that attitudes condoning IPV mediated the relationship between benevolent sexism and IPV perpetration. Furthermore, these results suggest that benevolent sexism is a unique risk factor for IPV perpetration among women, but not men (A'Court, 2020). This is consistent with Ambivalent Sexism Theory which suggests that benevolent sexism protects women from harm as long as they conform to traditional gender roles (Glick & Fiske, 1996). Also similar to the current study, A'Court (2020) found that benevolent sexism was *indirectly* associated with women's IPV perpetration through the endorsement of attitudes which supported IPV, rather than directly. This suggests that women's endorsement of benevolent sexism, alone, does not lead to IPV perpetration, but rather, both benevolent sexism and attitudes condoning IPV are necessary for IPV perpetration. Overall, the results from our study, in addition to A'Court (2020), suggest that attitudes supporting IPV play an explanatory role in the relationship between sexism and IPV perpetration for both men and women.

Similar results were reported in Juarros-Basterretxea, Overall, Herrero, and Rodríguez-Díaz (2019)'s study which explored whether attitudes condoning IPV mediated the relationship between ambivalent sexism and the use of psychological IPV in a sample of 196 male prisoners from Spain. The results indicated that positive attitudes towards IPV mediated the relationship between hostile sexism and the use of psychological IPV. However, benevolent sexism did not have a significant direct or non-direct association with psychological IPV (Juarros-Basterretxea, 2019). This is expected given that benevolent sexism aims to protect women from harm (Glick & Fiske, 1996). These results further support the finding that benevolent sexism is a unique risk factor for female IPV, but not male IPV (A'Court, 2020). Taken together, the results from the current study, in addition to Juarros-Basterretxea et al. (2019) and A'Court (2020) demonstrates that attitudes condoning violence plays an explanatory role in the relationship between sexism and IPV perpetration. Given the dynamic nature of attitudes, treatment interventions for IPV should aim to target these pro-violent attitudes (Bonta & Andrews, 2015).

Summary of results

Overall, the present study has found similar rates of IPV perpetration and victimisation among women residing in Sri Lanka and New Zealand, for both minor and severe forms of IPV. These results challenge the Revised Gender Symmetry Theory (Archer, 2018) which suggests that male victimisation from women, even for minor IPV, would be unlikely in patriarchal countries. However, the results from the current study suggest that IPV is a gender-inclusive problem affecting both men and women in western and patriarchal countries. Furthermore, the study has also found that women in Sri Lanka were also more approving of IPV among both genders and endorsed higher levels of benevolent sexism and hostile sexism when compared to women in New Zealand. Lastly, the study examined whether attitudes condoning IPV mediates the relationship between sexism and IPV. The results found that

attitudes condoning female IPV mediated the relationship between benevolent sexism and IPV perpetration for women in Sri Lanka and New Zealand. No direct or indirect relationship was found between women's endorsement of benevolent sexism and IPV victimisation or between hostile sexism and IPV victimisation. The following will discuss the implications of these results for clinical practice.

Implications for Clinical Practice

Intimate partner violence is a global public health issue (WHO, 2005b) and its prevention therefore requires a public health response that offers primary, secondary and tertiary prevention. According to public health, prevention strategies should aim to benefit the largest population of people possible using methods, known as primary, secondary and tertiary prevention strategies (Dixon & Graham-Kevan, 2011; Hamilton & Browne, 2002). Primary prevention methods for IPV are targeted at the entire population to prevent the development of IPV before it begins (Dixon & Graham-Kevan, 2011). Secondary prevention techniques are aimed at targeting those who are classified as high risk for IPV, such as student populations (Archer, 2000; Rennison, 2001; Dixon & Graham-Kevan, 2011). Lastly, tertiary prevention techniques are designed to help those who directly impacted by IPV, including victims and perpetrators of IPV, in the aim to reduce re-offending and the negative health outcomes associated with this social problem (Dixon & Graham-Kevan, 2011). The implications that the results of the present study offer for primary, secondary and tertiary prevention strategies will now be discussed.

Primary Interventions

Primary prevention uses TV and poster campaigns accessible to the entire population to change attitudes about health problems and promote societal change (Dixon & Graham-Kevan, 2011). Given that attitudes condoning female IPV and benevolent sexism are risk

factors for female IPV, primary prevention strategies targeting these factors may help to decrease male victimisation. This is not only beneficial for men, but it may also serve to reduce female victimisation due to the reciprocal nature of IPV (Whitaker et al., 2007). However, the majority of the primary prevention campaigns are driven by the Gendered Theory, portraying IPV as perpetrated by men towards their female partner which is 'is not ok' (Keller, Wilkinson, & Otjen, 2010). Such campaigns may further reinforce the idea that female IPV is trivial and non-injurious (Keller et al., 2010). Instead, the current study suggest that primary prevention techniques should be gender inclusive and target *both* men's and women's attitudes condoning *IPV* across countries. Indeed, Allen (2018) has shown that posters depicting female IPV towards men are effective at reducing attitudes which condone female IPV among male and female participants. Furthermore, men and women who were exposed to posters displaying female violence towards men also showed a reduction of benevolent sexism. However, caution should be taken before launching campaigns that reduce benevolent sexism toward women because the reduction of benevolent sexism *may* inadvertently increase hostile sexism and violence towards women, especially in non-western countries such as Sri Lanka (Glick & Fiske, 1996; Allen, 2018). Further research would be required before posters depicting female IPV are exposed to the general public to ensure that it is a safe procedure that has the desired effect (Allen, 2018).

Secondary Prevention:

Secondary interventions should be conducted for those who are at higher risk of IPV, such as student populations aged between 16-24 years (Archer, 2000; Rennison, 2001; Stratus, 2008). The current study shows that IPV is a significant problem for students across countries, with at least 40% of students in Sri Lanka and 30% of students in New Zealand experiencing some form of physical IPV within the past 12months. Therefore, university campuses may

provide an ideal context to introduce prevention strategies to a large cohort of students. For example, Clark University in Massachusetts (USA) has developed a gender-inclusive prevention programme for students, known as the Clark Anti-Violence Education programme (CAVE) (Clark University, 2018). This programme includes compulsory modules which all students need to complete at three time points: prior to beginning university, the first week of term, and several weeks into the term. These modules aim to educate the students about stalking, harassment and the importance of consent (Clark University, 2018). Furthermore, the programme teaches students to challenge beliefs and attitudes which condone IPV and sexual assault (Clark University, 2018). Such programmes may be effective at reducing IPV within the student population.

Universities in New Zealand and Sri Lanka are beginning to recognise the importance of reducing IPV among student populations. For example, the University of Auckland in New Zealand has developed the Family and Relationship Violence and Abuse Policy which aims to prevent family violence on campus and provide support for students and staff who are experiencing family violence (University of Auckland, 2015). In Sri Lanka, Axemo, Wijewardena, Fonseka, Cooray and Darj (2018) has investigated the efficacy of an educational programme which has been developed to educate students and teachers about gender-based violence (GBV) and help them challenge stereotypic gender attitudes (Axemo et al., 2018). Although such programmes have good intentions to reduce IPV, it predominately focuses on male-to-female IPV and fails to account for female IPV, which may further reinforce the idea that female IPV is trivial and non-injurious (Axemo et al., 2018). The results of this study suggest that universities in Sri Lanka and New Zealand should develop gender-inclusive prevention programmes which address both male *and* female IPV. These programmes should communicate the idea that IPV towards any gender is not acceptable.

Tertiary prevention. The results of the current study show that IPV is a gender-inclusive problem, perpetrated by both men and women. Despite this research, treatment interventions often focus on male IPV, since male IPV is associated with greater injury and risk to the victim (Archer 2000). One of the widely used treatment programmes for male perpetrators, known as the Duluth Treatment, aims to reduce male IPV by teaching men to challenge their patriarchal beliefs and the view that violence towards women is acceptable (Pence & Paymar, 1993). By focusing on male IPV, the Duluth Treatment programme fails to account for female IPV, male victimisation and the bidirectional nature of IPV. As a result, there are limited treatment interventions for female perpetrators and the majority of the interventions for women are adapted from the Duluth Treatment model, which is ineffective for female perpetrators (Tutty, Babins, Wagner & Rothery, 2017). Therefore, future research should aim to better understand the mechanisms driving female IPV and develop appropriate interventions to target these mechanisms. Reducing female IPV will not only benefit male victims but will also serve to benefit women given the bidirectional nature of IPV (Whitaker, Haileyesus, Swahn, & Saltzman, 2007).

The current study has found that benevolent sexism is indirectly associated with IPV perpetration through attitudes which condone female IPV for women residing in New Zealand and Sri Lanka. Therefore, to reduce female IPV, it is necessary to challenge these pro-violent attitudes which condone female IPV. Pro-violent attitudes are considered *dynamic* risk factors and therefore can be modified using treatment which targets these cognitions, such as Cognitive Behavioural Treatment (CBT) (Murphy & Eckhardt, 2005; Polaschek, Wilson, Townsend, & Daly, 2005; McGuire et al., 2008). CBT uses the technique of cognitive restructuring to modify cognitive distortions which condone violence (Murphy & Eckhardt, 2005; Bonta & Andrews, 2016). Given the interconnected nature between cognitions and behaviour (Padesky & Greenberger, 1995), modifying dysfunctional cognitions about IPV may reduce recidivism

(Kroner & Yessine, 2013). Given that most of the research investigating the efficacy of CBT has been conducted with violent offenders (Polaschek et al., 2005), future research should investigate whether CBT is effective at altering pro-violent cognitions among female perpetrators of IPV. CBT treatment for female perpetrators of IPV should integrate the Risk Need Responsivity (RNR) framework to improve better outcomes (Bonta & Andrews, 2016). Firstly, the Risk Principle recommends that the intensity of the treatment should match the risk levels of the offender, with greater resources allocated for high-risk offenders (Bonta & Andrews, 2016). According to the Need Principle, treatment should target individual's criminogenic needs such as substance abuse problems, antisocial peers and antisocial cognitions (Bonta & Andrews, 2016). Lastly, the Responsivity Principle recommends that treatment should be adapted to the unique characteristics of the individual, including their cultural background (Bonta & Andrews, 2016). This suggests that CBT modules should be modified to be culturally appropriate for women residing in New Zealand and Sri Lanka.

Given the bidirectional nature of IPV found among university students in New Zealand and Sri Lanka, treatment interventions should be available for both partners, either through the university or community health care providers. For example, previous research has shown that reducing IPV of the designated perpetrator is often only possible if their partner has also stopped using IPV, due to the reciprocal nature of IPV (Feld & Straus, 1989, Gelles & Straus, 1988). Therefore, conjoint treatment such as couples counselling may be effective at reducing IPV among both partners (Karakurt, Whiting, Esch, Bolen, & Calabrese, 2016). Furthermore, couples counselling, if assessed as appropriate, has the benefit of improving communication difficulties (Baucom, Sevier, Eldridge, Doss, & Christensen, 2011), conflict management issues (Davidson & Horvath, 1997), relationship complications (Cohen, O'Leary, & Foran, 2010) and relationship dissatisfaction. Despite the importance of couples counselling, this is rarely available for students, especially in developing countries such as Sri Lanka

(Subramaniam & Sivayogan, 2001). Therefore, more counselling resources should be made available for university students in western and patriarchal countries.

The exposure to IPV may increase the risk of mental disorders for the victims, including depression, anxiety and PTSD (Hines & Douglas, 2011a, Reid et al., 2007; Campbell, 2002; Coker et al., 2002). Therefore, mental health services should also be available for students who experience IPV. While universities in New Zealand provides students with mental health support through University Health and Counselling Services (The University of Auckland, n.d; Victoria University of Wellington, n.d), such facilities are rarely available for students in developing countries such as Sri Lanka where funding and resources for mental health are low (Mendis, 2004; Saxena, Thornicroft, Knapp & Whiteford, 2007). Mental health professionals in Sri Lanka should therefore attempt to increase the funding for mental health services in university settings.

Male victimisation

Contrary to the Revised Gender Symmetry Theory (Archer, 2018), our results found that women in both western and patriarchal countries used physical violence towards their male partner at similar rates. These results are consistent with previous research which has also reported high rates of female IPV and male victimisation across different countries (Darko et al., 2018; Esquivel Santoveña, 2013; Moffitt & Caspi, 1999; Straus, & Ramirez, 2007; Straus, 2008). Despite the research reporting female perpetration, there are limited primary, secondary or tertiary prevention efforts targeting female perpetrators or male victims of IPV (Goldenson et al., 2009). Thus, male victimisation warrants special consideration here. The general acceptance of female IPV (Fiebert & Gonzalez, 1997), as well as the stigma associated with male victimisation (Tilbrook, Allan, & Dear, 2010), often means that male victims are less likely to report abuse to the police (Felson & Pare, 2005). Even when men do disclose

victimisation to the police, they are frequently denied access to support services (Mind the Gap, 2016). Furthermore, male victims who disclose abuse to the victim support agencies are likely to be blamed for the abuse and referred to batter treatment programmes (Tilbrook et al., 2010; Douglas & Hines, 2011). The limited support for male victims of IPV is concerning since they suffer from a range of adverse mental and physical health outcomes, including increased risk of posttraumatic stress symptoms (Hines, 2007; Hines & Douglas, 2011a). Whilst further research is needed in countries with low gender empowerment of women, there is arguably a need for societal education programmes aimed at educating the masses about the range of IPV in countries with higher gender empowerment for women, including men's victimisation experiences. Furthermore, practitioners, policy makers and service providers should ensure that resources are available for male victims in both western and patriarchal countries. One area in which improvements could be made across countries is in the identification of IPV in all genders. For example, when assessing for intimate partner violence, the New Zealand Family Violence Intervention protocol requires all females aged 16 and over to be routinely asked about IPV, while men aged 16 years and over should only be asked about IPV *if* they present with signs and symptoms which could indicate IPV (Fanslow & Kelly, 2016). It has been argued that discrepancies in how men and women are asked about IPV are due to the "differences in prevalence and severity of violence against men" (Fanslow & Kelly, 2016, p. 52). Such policies reinforce the idea that female IPV is trivial and limit the support available for male victims. Based on the current research findings, it is essential that both men and women in patriarchal and western countries are routinely screened about their experiences of IPV and that research is gender inclusive in nature.

Strengths, Limitations, and Recommendations for Future Research

This is the first cross-cultural study to test the Revised Gender Symmetry Theory (Archer, 2018) using a sample of women from two countries which are above and below the mean global gender empowerment score (Sri Lanka and New Zealand). Bidirectional IPV for minor physical IPV is seen among women residing in Sri Lanka and New Zealand, suggesting that IPV is a gender-inclusive problem affecting both men *and* women. Furthermore, the current study expands the limited knowledge of female IPV, finding that benevolent sexism and attitudes condoning violence are risk factors of IPV for women residing in western and patriarchal countries. Most importantly, the study investigated the mechanisms driving female IPV, showing that for both countries, women's endorsement of benevolent sexism is indirectly associated with IPV perpetration *through* the approval of female IPV. Therefore, interventions for female perpetrators should address women's pro-violent cognitions as well as their benevolent sexist beliefs. Despite the novelty of the study and the important implications it has for clinical practice, our study has several limitations which should be taken into account. The following will discuss the limitation of the present study and the recommendations for future research.

Firstly, we used the CTS-2 to measure women's IPV perpetration and victimisation over the previous 12months as this measure has good psychometric properties and has been previously used with student populations (Straus, Hamby, Boney-Mcoy, & Sugarman, 1996). However, the CTS-2 focuses on the frequency of IPV and lacks contextual information such the intentions for violence and the history of the violence (e.g., who initiated the violence) (DeKeseredy & Schwartz, 2011; Currie, 1998). Therefore, future research should use supplementary measures or adopt qualitative research to gather important contextual information, including the proximal triggers, meaning, and function of IPV. Such contextual information allows researchers to better understand the nature of IPV and how it operates in

the context of the relationship. The current study did not investigate the effects of IPV, such as the injury to the victim or the fear experienced by the victim. It is possible that women in patriarchal countries such as Sri Lanka experience greater injury and fear when compared to women in western countries such as New Zealand. Therefore, future research testing the Revised Gender Symmetry Theory should include additional items to investigate the effects of IPV.

Women's responses on the CTS-2 are subject to recall bias given that they were asked about their experiences of IPV within the past 12 months. Many people often fail to recall instances of violence over a long period of time, leading to under-reporting (Jouriles, McDonald, Garrido, Ronsefield & Brown, 2005). Therefore, the true rates of IPV may be higher than that reported in the current study. Future research should use methods which reduces recall bias such as experience sampling method (ESM) which consists of daily telephone data collection, daily paper diaries, and monthly retrospective semi-structured interview (Sullivan, Khondkaryan, Dos Santos, & Peters, 2011). For example, ESM methods such as daily paper diaries require the participant to record events of IPV close to the time it occurs which will yield more accurate and reliable data by eliminating recall bias (Sullivan et al., 2011). Another advantage of the ESM is that it allows us to obtain qualitative data about the event, including contextual information and proximal triggers of IPV (Sullivan et al., 2011). Understanding the proximal triggers for IPV is important because treatment interventions should target these factors.

The discrepancies in the administration of the questionnaires may have influenced student's responses. The questionnaires for the Sri Lankan sample were administered in lecture theaters using paper and pencil questionnaires while students in New Zealand completed the questionnaire online. We chose a pencil and paper method for the Sri Lankan sample since the access to computers is limited in Sri Lanka. Although students in Sri Lanka were spaced out to

ensure privacy, they may have felt less comfortable with disclosing sensitive information in this setting, which could have led to under-reporting of IPV perpetration and victimisation. As a result, the true rates of IPV in Sri Lanka may be higher than that reported in the current study and hence a larger social problem.

Furthermore, given the sensitive nature of the questions asked, it is likely that social desirability may have affected the rates of IPV reported (Arias & Beach, 1987; Rosenbaum & Langhinrichsen-Rohling, 2006), especially in traditional cultures such as Sri Lanka (Haj-Yahia & De Zoysa, 2007). For example, those with higher levels of social desirability have a desire to be viewed positively and therefore are less likely to report violence perpetration (Arias & Beach, 1987). Although anonymous self-report questionnaires are less prone to social desirability when compared to other methods such as in-person interviews (Knapp & Kirk, 2003; O'Leary & Murphy, 1992), social desirability may have still influenced the student's responses, especially in conservative countries such as Sri Lanka. Future research in this area should control for social desirability using scales such as the Social Desirability Scale of the Personal and Relationships Profile (Straus, Hamby, Boney-McCoy, & Sugarman, D, 1999; Straus & Mouradian 1999). This scale includes 13 self-statements which are undesirable but are usually accurate for the majority of people. The denial of the self-statements reflects a higher degree of social desirability and a greater tendency to under-report IPV perpetration. Another way to increase the reliability of the responses on the self-report questionnaires is to collect data from both partners as this allows for cross-validation of the data (Esquivel-Santoveña & Dixon, 2012).

Given that the current study only collected data from one partner, future research could benefit from gathering qualitative dyadic information from both partners (O'Leary & Smith Slep, 2003). This is important because relationship dynamics within the context of the relationship and broader family system influence IPV (Straus, 1990; Magdol, Moffitt, Caspi,

& Silva, 1997; Morse, 1995; Straus & Gelles, 1988a). According to Family Conflict Theory, IPV occurs due to typical frustrations or conflicts within the relationship (Straus, 1990; Magdol et al., 1997; Morse, 1995; Straus & Gelles, 1988a). Therefore, investigating IPV among couple dyads may allow us to understand how factors such as frustration and conflict within the relationship contribute to IPV. Furthermore, men's and women's endorsement of sexism are also interdependent and, therefore, future research should aim to examine sexism among both members of the couple. Using dyadic longitudinal studies, Hammond, Overall, and Cross (2016) have found that women's acceptance of benevolent sexism is dependent on their perceptions of their partners' acceptance of benevolent sexism. For example, women who perceived their partner as endorsing higher levels of benevolent sexism were more likely to adopt greater levels of benevolent sexism over time than women who perceived their partner to be holding lower levels of benevolent sexism (Hammond et al., 2016). In fact, lower perceptions of partners' benevolent sexism were associated with a decline in women's agreement of benevolent sexism over time (Hammond et al., 2016). The interdependent nature of benevolent sexism was further supported by experimental data, in which manipulation to increase women's perception of their partner's agreement with benevolent sexism led to greater levels of benevolent sexism among women. The authors suggested that women's endorsement of benevolent sexism was dependent on their perception of their partner's beliefs rather than the society's level of sexism. Interventions to reduce benevolent sexism should therefore target both men's and women's agreement of benevolent sexism. Given the interdependent and dynamic nature of benevolent sexism, it is recommended for future research to explore sexism among both members of the couple.

The current study used the BaRAS questionnaire (Dixon, 2011) to explore women's attitudes towards IPV used by men and women under different levels of provocation. Therefore, this questionnaire measures women's approval of IPV carried out by a *third party*,

rather than measuring women's attitudes towards their *own* experiences of IPV. Future research could examine whether women's attitudes condoning their own use of IPV mediates the relationship between benevolent sexism and IPV perpetration. If a significant mediation is found, then treatment interventions should target these attitudes condoning their use of IPV as well as general attitudes which condone female IPV.

The current study was exploratory in nature, aimed at investigating whether attitudes mediate the relationship between sexism and IPV, rather than to examine a path model from sexism to IPV. As a result, we employed a cross-sectional design and concurrent mediation models to investigate this research question (Jose, 2013; Jose, 2016; Field, 2013). One of the limitations of concurrent mediation models is that it is unable to examine the temporal relationship between the variables in the mediation model (Jose, 2016). As a result, we cannot identify whether attitudes condoning female IPV preceded or followed women's IPV perpetration. The temporal relationship can be established using longitudinal research. For example, using data from a longitudinal study (N= 2431), Nabors and Jasinski (2009) has found that attitudes supporting IPV seem to have followed men's IPV perpetration. Aggressive individuals may modify their attitudes as a way of justifying their violent behaviour (Bonta & Andrews, 2015). For instance, individuals who disapprove of IPV may experience cognitive dissonance if they find themselves using IPV against their partner, leading to a sense of discomfort. This cognitive dissonance can be resolved by changing their attitudes to match their violent behaviour (Bern, 1972). As a result, attitudes condoning IPV may have followed violent behaviour as a way of resolving cognitive dissonance. On the other hand, using a sample of 577 teenage boys, Reyes et al. (2016) has found that attitudes supporting IPV preceded IPV perpetration. This is supported by the Information Processing Model of Aggression (Huesmann, 1988) which suggests that, for aggression to happen, the perpetrator has to hold attitudes which approve of the use of aggression. Despite the research suggesting that attitudes

condoning violence proceed IPV perpetration (Huesmann, 1988; Reyes et al., 2016), the cross-sectional design of the current research makes it difficult to establish with certainty the temporal relationship between the variables in our mediation model (Jose, 2016). Future research should conduct longitudinal research, as well as longitudinal mediation models to investigate the temporal relationship between attitudes condoning female IPV and IPV perpetration among women. Establishing the direction of the relationship is important because treatment and preventative interventions should aim to target the factors which precede IPV perpetration.

It is important to acknowledge that students in both countries showed low levels of approval towards IPV in general, with approval levels for minor female IPV ranging from 0.52 (New Zealand sample) to 0.90 (Sri Lankan sample) on a scale of 0-4. Previous research using student samples has also reported low levels of approval towards IPV (Cauffman, Feldman, Jensen, & Arnett, 2000; Cavanagh, 2017), with approval levels for female IPV ranging from 1.10 to 1.80 on a scale of 0-4 depending on the type provocation (Cavanagh, 2017). Although slight increases in approval of IPV can influence the likelihood of IPV perpetration (Spencer, Morgan, Bridges, Wash-Busk, & Stith, 2017), the low levels of approval towards IPV found in the current study suggests that there must be other factors which are contributing to women's IPV perpetration (Dutton, 2006, O'Leary et al., 2007, Stith et al., 2004). Therefore, future research should expand on the current research by considering broader risk factors for female IPV perpetration. For example, using 453 couples, O'Leary et al. (2007) found that multiple risk factors predict female and male IPV perpetration, including dominance/jealousy, marital adjustment and partner responsibility attributions. Other risk factors for female IPV include Cluster B personality traits, fear of abandonment, limited emotional regulation skills and a history of violent behaviour during childhood or adolescence (Goldenson, Spidel, Greaves, & Dutton, 2009). This demonstrates that attitudes condoning violence are only one risk factor

among a range of other risk factors which influence IPV perpetration. Future research should consider how *multiple risk factors* contribute to IPV perpetration among women across different countries (Dutton, 2006).

The current study used is a convenience sample of university students and, therefore, the results should not be generalised to the general population. For example, university students in western countries such as New Zealand typically have 'WEIRD' characteristics *(white, educated, industrialised, rich and democratic)* (Henrich, Heine, & Norenzayan., 2010), which limits the ability to generalise the findings to the rest of New Zealand who differs from these characteristics. For instance, since the majority of the students identified themselves as New Zealand European, the results of the current study may not apply to women from different ethnic groups in New Zealand such as Māori, Pacifica or Asian populations. Future research should investigate IPV using a random sample of women from the general community as this sample would be a better representation of the New Zealand population. For the Sri Lankan sample, majority of the students' identified themselves as Singhalese, which limits the ability to generalise the results to the wider population, which consists of women from other ethnic groups, such as Tamil or Burger. Therefore, future research may wish to replicate our study using a community sample which better represents the Sri Lankan demographics. Furthermore, university students in Sri Lanka typically come from middle-class backgrounds, live in urban cities, and often have educated parents, which further limits the ability to generalise the results to the wider community (Haj-Yahia & De Zoysa, 2007). For example, women with lower levels of socioeconomic status and education may experience greater levels of IPV than that reported in the current study (Moonesinghe., 2002). Similarly, women living in rural areas, with lower levels of household income and education are likely to endorse attitudes which accept IPV towards women (Jayasuriya et al., 2011). This suggests that the results of the current study may not apply to Sri Lankan women residing in rural areas, with lower levels of education and

socioeconomic status. Future research should explore IPV among women from the general community and those living in rural areas of Sri Lanka.

Furthermore, given that the women in the Sri Lankan sample were recruited from undergraduate social sciences courses such as Psychology, History and Social Studies, it is likely that they are more educated and aware about issues of gender inequality and patriarchy which exists in Sri Lanka when compared to women from the general community who may be naïve to such topics. As a result of this awareness, women in our study could have been more motivated to challenge the patriarchal systems through the use of physical IPV (Glick & Fiske, 1996), leading to higher rates of IPV perpetration reported in the current study. Future research should, therefore, investigate the rates of IPV among students from other faculties as well as women from the general public.

Since the current study investigated IPV among university students, the results should not be generalised to clinical populations as this will result in *sample fallacy* (Johnson, 1995). For example, whilst the rates of severe IPV was low among the student population recruited in the current study, women seeking support from domestic violence shelters are more likely to experience severe forms of IPV and injury (Karakurt, Smith, & Whiting, 2014; Harding & Helweg-Larsen, 2009). For example, using a sample of 56 women from domestic shelter homes, Harding and Helweg-Larsen (2009) have found that approximately 45.5% of the women in the sample reported being threatened with a knife or gun while 70.9% of women have reported been beaten up by their male partners. Such exposure to severe forms of IPV may alter the victim's cognitions and attitudes towards IPV. For example, women who are victims of severe IPV such as wife-beating may approve of IPV (Sayem, Begum, & Moonesha, 2012). Given the low rates of severe IPV reported in the current study, our results may not reflect the attitudes held by women who experience severe forms of IPV. Future research may wish to investigate the attitudes towards IPV among women from clinical populations.

The current study investigated the rates of IPV among university students, which limits our ability to generalise the results to women from different age groups, especially since IPV has shown to decrease with age (Stets & Straus, 1989; Suitor, Pillemer, & Straus, 1990). Therefore, future research should replicate the present study in a wider age group of women. Majority of the students in the current study were not cohabiting with their partner, which may limit the opportunity for IPV to take place (Gamez-Gaudix, Straus, & Hershberger, 2011; Renner & Whitney, 2012; Straus & Ramirez, 2004). For example, IPV is higher among couples who are cohabiting since living together provides more instances for conflict and disagreement (Gamez-Gaudix et al., 2011; Renner & Whitney, 2012; Straus & Ramirez, 2004). Opportunities for violence may be particularly low in the Sri Lankan sample where none of the students reported living together with their partners. This is consistent with the Sri Lankan Buddhist values which discourage cohabiting outside of marriage (Department of Census and Statistics, 2007). Furthermore, relationships outside marriage are often kept secretive, especially if the individuals have not disclosed their relationships to their parents or wider family (Abeyasekera, 2016). As a result, couples in Sri Lanka may have limited time to spend together, which reduces the opportunity for conflict and IPV to occur. Furthermore, living together may reinforce differential gender roles, in which Sri Lankan women are expected to adopt the role of the "care-taker" while men are expected to provide for the family. Such traditional gender roles may strengthen patriarchal values which allow men to use violence towards women (Dobash & Dobash, 1979). Therefore, the rates of IPV reported in the current study may be lower than that experienced by married women. To investigate this further, future research should replicate the current study using a sample of married women from New Zealand and Sri Lanka.

Whilst the current research investigated physical IPV, it is important to recognise that physical IPV does not occur in isolation from other types of IPV. In fact, there is a high comorbidity between the different types of IPV, such as physical, psychological and sexual

IPV. For example, Dichter, Marcus, Wagner, and Bonomi, (2014) has found that approximately 95% of women who experienced physical or sexual IPV also experience psychological IPV while 87% of women who experienced sexual IPV were also victims of physical IPV. This demonstrates the significant overlap between the different types of IPV. Therefore, future research should extend the current research by investigating psychological and sexual IPV among women residing in countries with different levels of gender empowerment of women.

Conclusion

This study shows that female university students in countries with differing levels of gender empowerment of women used IPV against their male partner at similar rates. Thus, it questions the validity of the Revised Gender Symmetry Theory (Archer, 2018) which suggests that women are primarily victims of male IPV in countries with low levels of gender empowerment for women, and that women in countries with higher gender empowerment engage in bi-directional violence of low intensity. Rather, the current study suggest IPV is a gender-inclusive problem, affecting both men *and* women across different cultures. Therefore, global research needs to develop more nuanced, gender-inclusive theories of IPV which take into consideration the bidirectional nature of IPV. The preconceived idea that women are victims of IPV only will increase stereotyped gender biases which arguably hinder effective treatment for female perpetrators and male victims of IPV. Furthermore, this study also highlights that women's endorsement of benevolent sexism is indirectly associated with their use of IPV in both countries, through attitudes which condone female IPV. Whilst longitudinal research is needed to understand the direction of the mediation, these results suggest that benevolent sexism and attitudes condoning violence are risk factors for female IPV across two countries which differ in their gender empowerment index. This research demonstrates the need for a gender inclusive public health approach to prevent IPV and for further gender inclusive research in under researched non-western countries to develop effective explanations

and prevention approaches. In particular, it is recommended that future research investigate how benevolent sexism and attitudes approving of IPV interact with multiple risk factors in the broader system to influence IPV (Dutton, 2006). Understanding the mechanisms which drive IPV would allow researchers to develop evidence-based treatment and policies to target these mechanisms and reduce the negative health outcomes associated with IPV.

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Appendices

Appendix A: Information and Consent Form (New Zealand sample)

Information and consent statement: Perceptions and experiences of aggression in heterosexual intimate relationships (Project # 28040)

Dr. Louise Dixon	Manuri Ranasinghe	Dr. Matt Hammond
Associate Professor	MSc Student	Lecturer
louise.dixon@vuw.ac.nz	ranasimanu@myvuw.ac.nz	Matt.Hammond@vuw.ac.nz
+64 463 6548		+64 463 5649

Thank you for your interest in this research project. Please read this information before deciding whether or not to take part.

What is the purpose of this project?

- This study sets out to better understand why people may use aggression (e.g., yelling at a partner, slapping them) in their intimate relationships. People use aggression in relationships across the world, yet we know very little about any cross-cultural differences. This research will study people who reside in different countries to examine if any differences exist.
- The study will focus on heterosexual relationships. This is not to undermine the fact that aggression can take place between coupes who identify with other sexual orientations, it is merely to keep this project feasible. Future research will explore issues outside of heterosexual relationships.
- This research has been approved by the School of Psychology Human Ethics Committee under delegated authority of Victoria University of Wellington's Human Ethics Committee *[project # 28040]*.

What is involved if you agree to participate?

- To be eligible to take part you must be 16 years old and have been in a heterosexual dating/intimate relationship that has lasted at least one month at some point in your adolescent or adult life.
- You will receive 0.5 IPRP credits for taking part in this study.
- You will be asked to complete an online questionnaire. First you will be asked for some general demographic information. You will then be asked 1) about different behaviors you may have used to solve conflict with your partner, for example if you have negotiated with them, insulted or shouted at them, or slapped or kicked them; 2) to consider and comment on a series of hypothetical scenarios where aggression arises between a man and woman in a couple. Aggressive acts are briefly described here, for example it may say something like 'Anne hit Peter in the face'; 3) about the extent to which you personally agree with statements about men and women and heterosexual relationships, for example you may be asked how much you agree or disagree with the statement 'Women, as compared to men, tend to have a more refined sense of culture and good taste'. You must complete each part of the study in

one sitting, as you cannot resume where you left off at another point in time. While you are participating, your responses will be stored in a temporary holding area as you move through the sections, but they will not be permanently saved until you complete all sections.

- It will take you approximately 15 minutes to complete.
- If there are any questions you feel uncomfortable answering you can tick the response that says 'I would rather not say'.
- At the end of the questionnaire we will ask if you are happy for the research team to use the information you have given. We will only save and use your data if you give us expressed permission to do so – **so please remember to click the "submit your responses" circle at the end of the questionnaire.**
- You can stop participating in this study at any time, without giving a reason and without penalty, up until you submit your completed questionnaire. You will automatically receive the credit if you complete the study and submit your responses. If you decide to not complete the study, you will need to contact the research team to get your credits

Privacy and confidentiality

- The research team cannot link your responses to your identity. **Please do not put your name anywhere on the survey as we want to make sure your responses are not identifiable**. This means that individual feedback on your responses will not be provided.
- Your de-identified data will be kept indefinitely by the research lead. It will definitely be kept for at least 5 years by the lead researcher after the study is written up and published so that any questions that might be asked of the study can be easily answered.

What happens to the information that you provide?

- The responses you provide will be collected and combined with other participants' responses. We will then analyze the data and look at overall patterns of responses. The results will be written up as an MSc thesis and also in the form of scholarly articles or presentations where we will talk about the general pattern of results. The lead researcher may also use your data in other related projects, or educational activities, and share it with competent professionals, or on online data repositories. If this happens (your data is shared, results are described, articles are written, or scientific presentations are given) it will be impossible for anyone to identify you.
- If you are interested in the results of this study, the main findings will be posted on the Interpersonal & Family Aggression Laboratory (IFAL) website in March 2021: https://ifal.co.nz

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

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

If you have any concerns about the ethical conduct of the research you may contact the Victoria University HEC Convener: Dr Judith Loveridge.
Email hec@vuw.ac.nz or telephone +64-4-463 6028.

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

Need to talk? https://1737.org.nz. Free call or text 1737 any time for support from a trained counsellor.

Lifeline: https://www.lifeline.org.nz. Free call 0800 543 354 (0800 LIFELINE) or text 4357 (HELP) any time

Family Violence Information Line: http://areyouok.org. Free call 0800 456 450, 9-11 pm 7 days a week.

Women's Refuge: https://womensrefuge.org.nz. Free call crisis line **0800 733 843** (0800 REFUGE) any time. Email info@refuge.org.nz (email is not a 24/7 response).

In the event of a life threatening emergency, dial 111.

Thank you for considering participating in this research.

CONSENT TO PARTICIPATE

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

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

☐ Yes, I agree to participate in this research.

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

Final window – prompts prior to questionnaire:

- It is important that any information received is accurate. We therefore ask you to complete the questionnaire in a private, quiet space, consider each question carefully and answer each question honestly.
- Please complete each part of the study in one sitting. You can take short breaks if you need to, but if you do, do not close the browser window as you may not be able to start from where you finished previously.
- If you chose to withdraw from the study before submitting your responses your data will not be saved.
- You will only receive credit if you complete the study and submit your responses. Students who withdraw from online studies will be given full credit if they contact the researcher conducting the study and notify them of their withdrawal.

Appendix B: Debrief Form (New Zealand sample)

Debrief statement: Information and consent statement: Perceptions and experiences of aggression in heterosexual intimate relationships (Project # 28040)

Dr. Louise Dixon
Associate Professor
louise.dixon@vuw.ac.nz
+64 463 6548

Manuri Ranasinghe
MSc Student
ranasimanu@myvuw.ac.nz

Dr. Matt Hammond
Lecturer
Matt.Hammond@vuw.ac.nz

Thank you for participating in this research study. Aggression in intimate relationships is a common international social problem and you have helped us to understand more about why people may be aggressive in their intimate and dating relationships in different countries.

This study aimed to explore how men's and women's perceptions of gender roles and aggression in intimate relationships relates to their own use of aggression in relationships. By comparing responses in different countries (for the moment Sri Lanka and New Zealand) national level differences in the use of aggression can be explored.

If researchers can understand what factors drive people to be aggressive, or abstain from aggression, then they can work towards designing interventions that reduce these drivers and bolster protective mechanisms. The overall effect of this will be to reduce the chances of relationship aggression occurring. By comparing national differences, we can understand if international approaches to intervention need to differ.

If you have experienced or perpetrated relationship aggression, or indeed if you find the contents of this questionnaire upsetting for some other reason and wish to discuss any issues about relationship aggression please access the free support detailed below.

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

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

If you have any concerns about the ethical conduct of the research, you may contact the Victoria University HEC Convener: Dr Judith Loveridge. Email hec@vuw.ac.nz or telephone +64-4-463 6028.

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

Need to talk? https://1737.org.nz. Free call or text 1737 any time for support from a trained counsellor.

Lifeline: https://www.lifeline.org.nz. Free call 0800 543 354 (0800 LIFELINE) or text 4357 (HELP) any time

Family Violence Information Line: http://areyouok.org. Free call 0800 456 450, 9-11 pm 7 days a week.

Women's Refuge: https://womensrefuge.org.nz. Free call crisis line **0800 733 843** (0800 REFUGE) any time. Email info@refuge.org.nz (email is not a 24/7 response).

In the event of a life threatening emergency, dial 111.

If you are interested in the results of this study, the main findings will be posted on the Interpersonal & Family Aggression Laboratory (IFAL) website in March 2021: https://ifal.co.nz

Thank you once again for taking part, we really appreciate your help wit this study.

Kind regards,

Louise Dixon, Manuri Ranasinghe, and Matt Hammond

Appendix C: Information and Consent Form (Sri Lankan Sample)

Information and consent statement: Perceptions and experiences of aggression in heterosexual intimate relationships (Project # 28040)

Dr. Louise Dixon	Manuri Ranasinghe	Dr. Matt Hammond
Associate Professor	MSc Student	Lecturer
louise.dixon@vuw.ac.nz	ranasimanu@myvuw.ac.nz	Matt.Hammond@vuw.ac.nz
+64 463 6548		+64 463 5649

Thank you for your interest in this research project. Please read this information before deciding whether or not to take part.

Who are we?
Manuri Ranasinghe is studying for an MSc in Forensic Psychology at Victoria University of Wellington and is carrying out this project as part of her degree. Louise Dixon is an Associate Professor in Forensic Psychology, and Matt Hammond a Lecturer in Psychology at Victoria University of Wellington. Louise and Matt are supervising Manuri's MSc, Louise is the primary supervisor and is therefore the lead researcher on this project.

What is the purpose of this project?

- This study sets out to better understand why people may use aggression (e.g., yelling at a partner, slapping them) in their intimate relationships in two different countries. People use aggression in relationships across the world, yet we know very little about any cross-cultural differences that may explain the aggression. This research will study people in Sri Lanka and New Zealand to examine if any differences in exist between these two countries that differ in the structural levels of equality between men and women.
- The study will focus on heterosexual relationships. This is not to undermine the fact that aggression can take place between coupes who identify with other sexual orientations, it is merely to keep this project feasible. Future research will explore issues outside of heterosexual relationships.
- This research has been approved by the School of Psychology Human Ethics Committee under delegated authority of Victoria University of Wellington's Human Ethics Committee *[project # 28040]*.

What is involved if you agree to participate?

- To be eligible to take part in this study, you must be 16 years old and have been in a heterosexual dating/intimate relationship that has lasted at least one month at some point in your adolescent or adult life.
- The questionnaire is anonymous, that is we will not ask you to tell us who you are. **So, please do not write your name anywhere on this questionnaire.** We simply ask you to provide your consent to participate by ticking the box at the end of this information sheet.
- You will be asked to complete a questionnaire. The questions will first ask you to provide some general demographic information. You will then be asked 1) about different behaviors you may have used to solve conflict with your partner, for example if you have negotiated with them, insulted or shouted at them, or slapped or kicked them; 2) to consider and

comment on a series of hypothetical scenarios where aggression arises between a man and woman in a couple. Aggressive acts are briefly described here, for example it may say something like 'Anne hit Peter in the face'; 3) about the extent to which you personally agree with statements about men and women and heterosexual relationships, for example you may be asked how much you agree or disagree with the statement 'Women, as compared to men, tend to have a more refined sense of culture and good taste'. The final sections will ask a few questions about how you experienced the survey.

- It is important that any information received is accurate. We therefore ask you to complete the questionnaire by yourself and do not talk to your classmates. Please consider each question carefully and answer each question honestly.
- If there are any questions you feel uncomfortable answering you can tick the response that says 'I would rather not say'.
- It will take you approximately 15 minutes to complete.
- If you decide to take part, you can take enter into a prize draw to win one of five supermarket vouchers worth 3,500 Rupee each. To enter please put your name and contact details on the paper slip provided. This information will be handed in separately to your questionnaire so the research team will not know which questionnaire is yours.
- You do not have to take part. If you do not want to you can carry on with other academic work for the next 15 minutes whilst your classmates are given the chance to take part.

Privacy and confidentiality

- The research team cannot identify who you are, your responses are anonymous. This means that individual feedback on your responses will not be provided.
- Your de-identified data will be kept indefinitely by the research lead. It will definitely be kept for at least 5 years by the lead researcher after the study is written up and published so that any questions that might be asked of the study can be easily answered.

What happens to the information that you provide?

- The responses you provide will be collected and combined with other participants' responses. We will then analyze the data and look at overall patterns of responses. The results will be written up as an MSc thesis and also in the form of scholarly articles or presentations where we will talk about the general pattern of results. The lead researcher may also use your data in other related projects, or educational activities, and share it with competent professionals, or on online data repositories. If this happens (your data is shared, results are described, articles are written, or scientific presentations are given) it will be impossible for anyone to identify you.
- If you are interested in the results of this study, the main findings will be posted on the Interpersonal & Family Aggression Laboratory (IFAL) website in March 2021: https://ifal.co.nz

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

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

If you have any concerns about the ethical conduct of the research you may contact the Victoria University HEC Convener: Dr Judith Loveridge. Email hec@vuw.ac.nz or telephone +64-4-463 6028.

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

Sri Lanka Sumithrayo. Call: (0)11-2692909 anytime for confidential emotional support. Available 365 days**.** Email: www.srilankasumithrayo.org

Mental health helpline (NIMH). Call '1926'**.** Any individual can call the helpline and receive mental health assistance from doctors at NIMH

Women In Need (WIN). Call: 011-2671411 for emotional support. Email: womeninneed87@gmail.com

In the event of a life threatening emergency, dial 1990

Thank you for considering participating in this research.

CONSENT TO PARTICIPATE

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

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

☐ Yes, I agree to participate in this research.

If you do not agree to participate in this research, that is fine, please just carry on with other academic work whilst your class mates are given the chance to take part.

Appendix F: Debrief Form (Sri-Lankan sample)

Debrief statement: Information and consent statement: Perceptions and experiences of aggression in heterosexual intimate relationships (Project # 28040)

Thank you for participating in this research study. We appreciate your help to understand more about why people may be aggressive in their intimate and dating relationships in different countries.

The aim of this research study is to investigate how men's and women's perceptions of gender roles and aggression in intimate relationships relates to their own use of aggression in relationships. By comparing responses in different countries (for the moment Sri Lanka and New Zealand) national level differences in the use of aggression can be explored.

If researchers can identify the factors that drive people to be aggressive, or refrain from aggression, then they are able to work towards creating interventions that reduce these drivers and reinforce protective systems. The study may help to reduce the chances of aggressive behaviour in romantic relationships. When we compare the national differences national differences, we can understand if international approaches to intervention need to differ.

Please access the free support detailed below if you have faced relationship aggression, or if you find the contents this questionnaire distressing for other reason or if you would like to discuss any questions related to aggression.

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

If you have any questions about this study, (now or in the future), do not hesitate to contact Louise Dixon or one of the research team (details stated at the top of this information document).

If you have any concerns about the ethical conduct of the research, you may contact the Victoria University HEC Convener: Dr Judith Loveridge. Email hec@vuw.ac.nz or telephone +64-4-463 6028.

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Women In Need (WIN). Call: 011-2671411 for emotional support. Email: womeninneed87@gmail.com

In an event of a life-threatening emergency, dial 1990

If you are interested in the results of this research study, the main findings will be posted on the Interpersonal & Family Aggression Laboratory (IFAL) website in March 2021: https://ifal.co.nz

Thank you once again for taking part, we really appreciate your help with this study.

Kind regards,

Louise Dixon, Manuri Ranasinghe, and Matt Hammond