

The Short-Term Effects of Gendered Primary Prevention Campaigns on Ambivalent Sexism
and Beliefs about the Acceptability of Intimate Partner Violence

By

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Abstract

This study aimed to explore the effects of portrayed gender roles in media campaigns on participants' endorsement of sexism and approval of intimate partner violence (IPV) across two studies. Study one ($N = 227$) used a within-subjects experimental design and consisted of two parts separated by a one-week period. In part one, participants completed an online questionnaire that consisted of the Ambivalent Sexism Inventory and the Beliefs about Relationship Aggression Scale. In part two, participants randomly viewed a poster depicting heterosexual IPV or a non-violent control, then completed the measures. Study two ($N = 380$) aimed to replicate study one using a between-subjects experimental design, and followed the procedure of study one, part two. ANOVA revealed that participants approved of female to male violence significantly more than male to female violence, and this approval was more pronounced for males, indicating a chivalrous norm. Regression analyses revealed the more that females, but not males, endorsed benevolent sexism (BS), the less they approved of male aggression (no provocation). Contrarily, the more male and female participants endorsed BS, the more they approved of female aggression (total and infidelity). Hostile sexism was not related to approval. Across both studies, regression analyses revealed that exposure to a poster depicting male aggression did not significantly change participants' approval of IPV or level of sexism. In contrast, it was found that participants who viewed a poster depicting female aggression approved of female aggression (total and infidelity) significantly less than participants who viewed a non-violent control poster, however, this was only observed in study two. Furthermore, regression analyses revealed that exposure to a poster depicting female aggression decreased participants' endorsement of BS, with females decreasing the most relative to baseline, however, this was only observed in study one. The need for prevention campaigns to be informed by multifactorial frameworks, rather than single factor gendered theories, is discussed alongside other implications for policy and practice.

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I didn't get here by myself,

I got here with the help of others.

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The Short-Term Effects of Gendered Primary Prevention Campaigns on Ambivalent Sexism
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Introduction

Definition and Prevalence Rates of IPV

Intimate partner violence (IPV) is a prominent global phenomenon and has been recognised by the World Health Organisation (WHO) as a ‘public health issue’ (Mandela & Brundtland, 2002). New Zealand reports some of the highest prevalence rates of IPV in the world (UN Women, 2011), with this social problem accounting for 25% of crime in New Zealand in 2013 (Ministry of Justice, 2015). Furthermore, statistics derived from the New Zealand Crime and Safety Survey (NZCASS) show that women (5.7%) are significantly more likely than men (4.4%) to experience any form of IPV, however, victimisation rates of physical violence for men and women are relatively equal (Ministry of Justice, 2015). Findings demonstrated that women (1.6%) reported experiencing significantly more sexual violence than men (0.5%), but men (17%) reported experiencing significantly more coercive and controlling behaviours than women (14.4%; Ministry of Justice, 2015). In contrast, no significant gender differences emerged for those experiencing physical offences; 3.4% of women and 2.5% of men. This finding of comparable rates of physical IPV between the sexes is not exclusive to New Zealand, rather it is consistent with international literature (Archer, 2000; Dixon & Graham-Kevan, 2011).

Findings revealing comparable rates of IPV perpetration between men and women began emerging in National Family Violence Surveys (NFVS), which were conducted in the United States in 1975 and 1985 (Straus & Gelles, 1986). Both studies used nationally representative samples and questioned both husbands and wives about their use and experience of physical and verbal aggression within the family. It was found that across the

10-year period, perpetration and victimisation rates for both sexes remained relatively stable and symmetrical, with approximately 12% of men and women engaging in physical violence and 4% engaging in severe violence. Interestingly, women reported higher perpetration rates of severe IPV over time, although injury rates across the sexes were similar. Despite methodologically rigorous findings highlighting the high prevalence rates of physical IPV experienced by women *and* men, much of the research has focused on the consequences of IPV for female victims, and prevention efforts have almost exclusively targeted male perpetrators.

Another consistent finding in the literature is that although IPV transcends age boundaries, it is predominantly experienced among younger populations. Concordant with this research, New Zealand statistics reveal that individuals among the ages of 15-19 years disproportionately experience any form of IPV victimisation (13.8%) relative to the New Zealand average (5.1%; Ministry of Justice, 2015). Alarming, research using community and student samples have reported prevalence rates exceeding those of the NZCASS. For example, Magdol et al. (1997) conducted a longitudinal study assessing a birth cohort of 861 21-year olds and found that 37.2% of women and 21.8% of men engaged in some form of physical violence against their partner. Similarly, international research conducted by Straus (2004) revealed that between 17-45% of university students had physically assaulted a partner in the past 12 months. Taken together, these findings not only highlight the elevated rates of IPV among younger populations, but also corroborate previous international findings that indicate men and women are equally likely to be both perpetrators, and victims, of IPV. In line with these findings Dixon and Graham-Kevan (2011) define IPV as “any form of [physical, sexual, and psychological] aggression and/or controlling behaviours used against a current or past intimate partner of any gender or relationship status” (p. 1145).

Collectively, the aforementioned findings emphasise the importance of understanding IPV experienced by young males and females and render the implementation of gender inclusive early prevention efforts of critical importance. As such, the current study explores the effects of IPV prevention efforts using a young New Zealand university sample of men and women.

Theoretical Perspectives of IPV

The gendered theory. The feminist movement of the 1970s gave rise to one of the pioneering theoretical perspectives on IPV, with gendered theorists positing that a patriarchal society and patriarchal beliefs are the direct cause of IPV (Dobash & Dobash, 1979). As a result, hostility towards women is expressed, including attitudes supportive of violence to women, and violence is therefore used to ensure that a patriarchal social structure is maintained. Furthermore, gendered theorists propose that female violence is best understood in the context of self-defence, retaliation, or pre-emption from male aggression (Dixon & Graham-Kevan, 2011). From this perspective, wider societal norms encourage male violence towards women, and therefore, high rates of male to female IPV are predicted.

There is a wealth of research concluding that IPV is primarily an issue of men's aggression towards women, caused by wider societal rules and socialisation processes that encourage male dominance and female subordination (Abrar, Lovenduski, & Margetts, 2000; Dobash & Dobash, 1979). Research supporting the asymmetrical nature of IPV reveal that severe and minor acts of aggression are overwhelmingly perpetrated by men against their female partners (Dobash & Dobash, 1979), and women are more likely to experience chronic levels of abuse (Tjaden & Thoennes, 1998), physical injuries, and negative emotional and psychological effects (e.g., post-traumatic stress disorder, depression, and anxiety; Dobash & Dobash, 2001).

Although such studies support a gendered conceptualisation of IPV, they have been heavily criticised as studies socially constructed from ideological motives, rather than based on methodologically sound empirical evidence (Dutton & Corvo, 2006; Graham-Kevan, 2007). For example, such studies have historically used selective samples: mainly women from shelters, emergency departments, or crime surveys (Dixon & Graham-Kevan, 2011; Dutton, 2006). Despite capturing a seemingly comprehensive account of violent behaviour, surveys using these types of samples are of low methodological quality and limit accurate reporting of IPV victimisation, especially for men (Esquivel-Santovena & Dixon, 2012). For example, if the underlying assumptions of the gendered perspective are internalised by the wider population (i.e., that women can only be violent when directly provoked), then female perpetrated IPV is likely to be minimised, and hence, is less likely to be viewed as a criminal offence. Indeed, research suggests that men are less likely to report their own victimisation rates compared to women, and do not view female violence against them as a crime (Dutton & Nicholls, 2005). Thus, assertions made by gendered theorists that violence against women is at an epidemic level appear to be misleading (Felson, 2002). This further highlights the representative sample fallacy, which has been identified as a potential issue that accounts for the increased rates of female victimisation relative to the general population. Likewise, these studies tend to neglect male victimisation, instead choosing to solely focus on female victimisation in relationships (e.g., Medina-Ariza & Barberet, 2003). Whilst this may be an appropriate extension of the gendered perspective, it does not allow researchers to explore relationship dynamics, female pathology, or men's experiences of IPV (Esquivel-Santovena & Dixon, 2012).

Indeed, an extensive body of research exists that undermines the credibility of the gendered perspective (e.g., Archer, 2000; O'Leary, Smith Slep, & O'Leary, 2007). For

example, Sugarman and Frankel (1996) conducted a meta-analytic review of 29 studies, examining the predictive relationship between wife assault and endorsement of a patriarchal ideology. Findings demonstrated limited support for the role of traditional sex-role ideology in the aetiology of male perpetrated IPV. In contrast to predictions, it was found that violent husbands did not hold more traditional attitudes and gender schemas towards women than non-violent husbands. Whilst partial support was provided for the gendered perspective, in that violent husbands held more positive attitudes towards violence than non-violent husbands, this was not linked to sex-role ideology. Hence, this may suggest that general attitudes towards violence are more predictive of IPV than patriarchal beliefs condoning male violence towards women. Similar conclusions have been drawn by other researchers examining the predictive role of patriarchy in its explanation of IPV (e.g., Hotaling & Sugarman, 1986). Taken together, these findings suggest that whilst endorsement of a patriarchal ideology may be a risk factor for IPV in some relationships, there is limited methodologically sound evidence to support the gendered notion that it is the sole cause of IPV. Consequently, the gendered perspective provides a monolithic explanation, and does not appear to provide an adequate framework from which to understand IPV (Dutton & Nicholls, 2005). Subsequent research has shifted from single factor to multifactorial frameworks such as the gender inclusive perspective (Hamel & Nicholls, 2006), which explores the experiences of both men and women, and has provided fruitful insight into an array of risk factors empirically supported to cause IPV.

A gender inclusive perspective. From a gender inclusive perspective, a range of individual and societal factors are believed to contribute to the aetiology of male *and* female perpetrated IPV (Hamel & Nicholls, 2006). For example, Dutton's (2006) nested ecological model identifies four systems that operate within an individual's life and interact to produce

violence. These four systems are: the macrosystem (broad cultural values and beliefs), the exosystem (immediate social structures e.g., peers), the microsystem (family unit or the immediate context e.g., relational conflict), and the ontogenetic system (an individual's developmental history). Unlike the gendered theory, this model provides different levels of explanation, and identifies various mechanisms that can be targeted in treatment and prevention. Meta-analytic research provides support for the importance of understanding and examining IPV using a multifactorial approach. For example, Stith, Smith, Penn, Ward, and Tritt (2004) used a nested ecological framework to identify the risk factors most strongly related to IPV perpetration and victimisation across 85 studies. The authors demonstrated that a moderate effect size was obtained between traditional sex-role ideology and perpetration of physical IPV, suggesting that patriarchal beliefs indeed play a lesser role in the aetiology of IPV than is promoted by gendered theorists. Indeed, five risk factors (emotional abuse, forced sex, illicit drug use, attitudes condoning violence, and marital satisfaction) were found to be stronger predictors of physical violence.

A consistent finding in the literature that refutes the plausibility of the gendered perspective, and further reinforces the need for a multifaceted approach, is that both men and women experience relatively equal rates of IPV victimisation (Straus & Gelles, 1986). An often cited meta-analysis conducted by Archer (2000) revealed that women were significantly more likely than men to use one or more acts of physical violence, and to use these acts more frequently. Contrarily, men were significantly more likely than women to inflict an injury. Such apparent disparities in prevalence rates have been linked to theoretical discrepancies, and differences in methodological quality that make it difficult to measure the true rate of physical IPV (Straus & Gelles, 1990). These studies are examples of research with high methodological rigour and help to address many of the outlined limitations associated with studies reporting high female victimisation rates. As a result, gender inclusive scholars use

nationally representative samples (e.g., NFVS), and explore the rates of female *and* male IPV perpetration and victimisation. Thus, a broader focus of enquiry is implemented than is characteristic of studies revealing gender asymmetry. This allows for a deeper understanding and a more accurate reflection of the true nature of IPV. Taken together, these discrepancies highlight the need to be critical of the validity of survey findings and suggests that society should be cautious of accepting the theoretical underpinnings promoted in popular literature (i.e., that IPV is a gender issue; Esquivel-Santovena & Dixon, 2012).

Prevention

A public health perspective. A critical statistic to emerge from the NZCASS was that if victimisation was stopped after two offences, 271,000 or 55% of IPV offences could have been prevented in 2013 (Ministry of Justice, 2015). A statistic such as this carries imperative implications for treatment and prevention campaigns aimed at reducing recidivism and combatting the onset of IPV respectively. From a public health perspective, there are three levels of prevention: primary, secondary, and tertiary. Primary prevention refers to preventive attempts targeted at the entire population to provide support and psychoeducation before the problem occurs, and secondary prevention refers to preventive attempts targeting those identified as high risk (Dixon & Graham-Kevan, 2011). Finally, tertiary prevention refers to preventive attempts targeting those who have experienced the problem and is heavily anchored in an assessment and treatment-based approach to intervention (Dixon & Graham-Kevan, 2011). The public health approach aims to provide the maximum benefit for the largest number of people possible and necessitates four steps to effective prevention. These are: (a) surveillance (define the problem through systematic collection of data), (b) identify risk and protective factors (causes for violence and who it affects), (c) develop and evaluate interventions (what works and for whom), and (d) implementation (scaling up effective

policy and programmes). This approach highlights the importance of identifying and understanding risk factors related to IPV perpetration and victimisation, which remains at the forefront of popular and academic debate. Despite rigorous empirical evidence supporting a multifactorial approach to IPV over single factor approaches (i.e., nested ecological model; Dutton, 2006), the gendered theory remains the most instrumental approach to constructing intervention strategies.

A gendered approach to IPV tertiary and secondary prevention. Historical attempts to reduce recidivism have largely focused on tertiary prevention (Keller, Wilkinson, & Otjen, 2010). The most prominent clinical tertiary interventions are grounded in a feminist psychoeducational approach, commonly referred to as the Duluth model, which promotes the re-education and reprogramming of men's patriarchal belief systems (Eckhardt, Murphy, Black, & Suhr, 2006). Unsurprisingly, there is limited empirical evidence supporting the effectiveness of these interventions in reducing recidivism rates of IPV. For example, Babcock, Green, and Robie (2004) conducted a meta-analytic review of 22 studies evaluating the efficacy of treatment programmes for domestically violent men. Findings demonstrated that overall treatment effects were small at best, and there was no significant difference in effect sizes when comparing the Duluth model and cognitive-behavioural therapy (CBT) based interventions. Taken together, these findings suggest that existing interventions have minimal impact on recidivism rates, and further highlight the need for a multifactorial approach to prevention to inform best practice.

From a secondary prevention level, risk assessment plays a leading role in determining individuals and groups at high risk of experiencing IPV. Despite a wealth of evidence to the contrary, women are overwhelmingly understood as the unidirectional victims of IPV at the hands of their male partners (Dixon & Graham-Kevan, 2011). Thus, men have

been the primary target of an array of risk assessment prevention efforts. This is despite methodologically sound research favouring a multifactorial approach over a single factor gendered model (e.g., Stith et al., 2004).

Whilst research suggests that tertiary and secondary prevention efforts are necessary, Wolfe and Jaffe (1999) argue that they are not the most effective strategy for combatting the onset of IPV. Indeed, research has demonstrated that to produce any meaningful societal reductions in IPV prevalence rates, universal campaigns should be put into practice (Biglan, 1995). Whilst it is unequivocal that public health issues like IPV require comprehensive, population-based approaches to prevention, there has been surprisingly little research conducted to determine their efficacy. As such, the current study aims to address this gap in the literature by focusing on IPV primary prevention campaigns, and further contribute to the existing literature exploring their efficacy.

Efficacy of primary prevention campaigns. A myriad of primary prevention interventions have been utilised worldwide as useful tools for ameliorating a range of health related issues. At the mass media level, television and radio adverts, billboards, and posters that speak to the masses, have been implemented to raise societal awareness about public health issues to elicit societal change. One of the targets of primary prevention campaigns is to educate the public, and shift attitudes and beliefs related to a behaviour in an attempt to (a) promote the adoption of a new behaviour, (b) stop or change current behaviours, or (c) prevent the emergence of new undesirable behaviours (Randolph, Whitaker, & Arellano, 2012). Such preventive attempts aim to modify behaviour in large audiences by constructing conceptual links between specific images or ideas promoted, and their associated messages (Valente, 2002). Research has indicated that campaigns have the potential to directly alter decision-making at the individual level by invoking cognitive and emotional responses, or

indirectly through vicarious learning or influencing norms within one's social context (Wakefield, Loken, & Hornik, 2010). Concordant with research, there is a consensus among health educators that behaviour change is a multi-stage process and thus, changes in societal awareness, cultural norms, attitudes, and beliefs are necessary precursors to overt behaviour modification (Straus & Gelles, 1986). Hence, the success of such campaigns rest with understanding what attitudes and beliefs are related to the behaviour of interest, so that it can be reduced or increased.

Primary prevention campaigns have had relative success in multiple health domains including smoking and illicit drug use (Wakefield et al., 2010), drinking and alcohol related crashes (Elder et al., 2004), and HIV prevention (LaCroix, Snyder, Huedo-Medina, & Johnson, 2014). Boles, Adams, Gredler, and Manhas (2014) examined the efficacy of a population-based media campaign designed to educate residents about sugary drinks and health related issues surrounding their consumption. They surveyed a random sample of 402 individuals, and found that significant attitudinal change was achieved, as nearly 80% of people who were aware of the media campaign reported intent to reduce the amount of sugary drinks they offered their children, and 50% reported intent to reduce their own consumption. Interestingly, no significant change in self-reported consumption was observed, which suggests that attitudinal change does not necessitate to observable changes in behaviour. Thus, media campaigns may be effective for raising awareness, and increasing knowledge about an issue, but have little success in the facilitation of behavioural change. This is in accordance with research that suggests the messages promoted in media campaigns are often based on expert opinions rather than empirical evidence of effectiveness in changing behaviour (Elder et al., 2004).

Similar conclusions have been drawn regarding the efficacy of primary prevention strategies employed in New Zealand. For example, Dickson and Willis (2016) completed an extensive review of a plethora of sexual violence primary prevention attempts and reported that the primary focus of prevention strategies was on sexual violence education and increasing awareness. The authors noted that this was a limitation, as the focus was not on targeting attitudes and prompting the development of new behaviours as tools for preventing sexual violence. Consequently, concerns were raised about the seemingly hollow evidential basis that many of the prevention activities were based on, and thus, developers run the risk of inadvertently promoting prevention strategies that are not optimally effective (Dickson & Willis, 2016). Despite this, some evidence for the effectiveness of prevention campaigns in achieving prolonged behavioural change was reported. For example, Foshee et al. (2004) found significant differences in self-reported physical and sexual violence perpetration and victimisation rates between adolescents involved in the Safe Dates Program and a comparison group at a 4-year follow up.

Efficacy of IPV primary prevention campaigns. The overwhelming focus of many IPV primary prevention campaigns is on targeting men's violence towards women. From a gendered perspective, this makes sense as sexism and patriarchal attitudes drive men's violence to women in relationships, so campaigns need to target these sexist attitudes. However, the viability of using this theory to design prevention campaigns is questionable, given that research has failed to demonstrate the empirical links between patriarchal beliefs and approval of IPV, and has not proven useful at other levels of the public health model.

As such, many of the prevailing issues outlined by prevention efforts in other areas (e.g., sexual violence; Dickson & Willis, 2016) parallel those in the IPV literature. For example, Keller et al. (2010) employed a pre-post quasi-experimental design to examine

gender differences in responses following exposure to a variety of prevention campaigns depicting incidents of male aggression. Results revealed that whilst there were no significant pre-test differences in perceived severity between women and men, post-test data revealed that women's perception of severity increased after the campaign; comparatively, men's perceived severity dramatically decreased. This finding illustrates that there are differences in how men and women internalise messages promoted in popular prevention campaigns. Keller et al. (2010) hypothesised that this alarming finding was due to men responding to the campaigns with a fear control response leading to defensive-avoidance mechanisms, which consequently led to a decreased recognition of domestic violence as a serious societal problem. Likewise, Katz (2000) argues that the dominant gender stereotyping promoted in domestic violence campaigns has led to a glorification of male dominance and violence, which has created a 'cultural norm' that neutralises the use and severity of domestic violence. Taken together, these findings suggest that there are issues associated with promoting homogenous messages through prevention campaigns about issues that are experienced by heterogeneous groups (Wakefield et al., 2010). Therefore, this means that primary prevention campaigns need to target attitudes and beliefs driving male *and* female perpetrated IPV, to create the biggest impact and reduce the effects of this societal issue. As such, the current study extends on existing research by examining the effects of prevention campaigns portraying both male to female violence and female to male violence.

Methods used to evaluate campaigns. Literature examining the efficacy of mass media campaigns have consistently identified the same methodological problem, namely, the lack of available comparison groups in evaluating the efficacy of interventions (LaCroix et al., 2014). Typically, evaluations use pre- and post-campaign data to measure effectiveness, or compare regions exposed to the campaign against regions who were not (Dickson &

Willis, 2016; LaCroix et al., 2014). However, this method does not allow for causal attribution of changes in knowledge, attitudes, or behaviour to the campaign message alone - although it has been noted that implementing true quasi-experimental designs to reliably control for accurate effect sizes would be both difficult and costly (LaCroix et al., 2014).

Theory suggests that media messages are likely to have the greatest impact when they are reinforced by other efforts, such as policies or community interventions that aid in creating a cohesive, standardized message about the problem behaviour (Elder et al., 2004). However, this highlights another prominent issue in the literature, which is that it is often very difficult to measure the intervention effects of campaigns in isolation (Elder et al., 2004; LaCroix et al., 2014; Wakefield et al., 2010). To address this gap, Randolph et al. (2012) systematically reviewed evaluations of health promotion campaigns that investigated the unique effects of different primary prevention strategies. Findings demonstrated that mass media campaigns were the most effective at increasing awareness and knowledge, while entertainment education and law enforcement strategies had the greatest impact on respondent's adoption of new behaviour. Whilst Randolph et al. (2012) positively contributed to addressing this issue, many of the reviewed studies lacked valid comparison groups. As such, the current study will utilise valid comparison groups, and control for extraneous variables so that causal attributions of change can be linked to the manipulation of aggressor's gender in each prevention campaign.

Pre-testing of message content is an important process in determining the success of mass media campaigns, and whilst it is arguably the most critical step in campaign development, it is also the most neglected (Bauman, Smith, Maibach, & Reger-Nash, 2006). Pre-testing can help to assess which themes and concepts are most relevant to the target audience and can ensure that an appropriate message is promoted (Elder et al., 2004). For

example, a mass media campaign designed to prevent alcohol-related problems, attempted to target this behaviour by encouraging drinking in moderation. Having not undergone pretesting prior to public exposure, it was found that mid-campaign, over one third of respondents thought the campaign was promoting alcohol consumption (Elder et al., 2004). Ironically, the campaign appeared to have the reverse effect than what was intended, which highlights the importance of this process in the implementation of prevention campaigns. As it stands, little evidential research taken from behaviour change theory and literature on ‘what works’ in prevention is used to guide the development and implementation of mass media campaigns (Elder et al., 2004).

Considering the mixed success of prevention campaigns in the amelioration of a myriad of public health issues, there is little robust evidence on what makes prevention campaigns effective (Stanley et al., 2016). Despite this, evidence taken from previously established campaigns demonstrated to be effective at changing attitudes, instilling behavioural intentions, and modifying behaviour can inform and maximise the utility of prevention strategies in other fields, such as IPV. For example, campaigns are more effective when: they include specific content (images depicting actual violence), are comprehensive and theory driven, and are of sufficient dosage (longer interventions are typically more successful than shorter interventions; Dickson & Willis, 2016; Nation et al., 2003). The application and dissemination of an appropriate message is notably the most crucial step in determining campaign effectiveness (Bauman et al., 2006). Where IPV is concerned, message content remains largely asymmetrical, often portraying that it is an issue of men’s violence towards women which ‘is not ok’. This is problematic, as it appears to be in stark contrast to the national crime statistics which indicate that women are equally, or more, likely to perpetrate IPV than men. Furthermore, research has consistently failed to demonstrate that

patriarchal beliefs drive male perpetrated IPV. Therefore, it is imperative that prevention campaigns target the normative belief that drives approval of male *and* female perpetrated IPV, so that meaningful societal reductions can be achieved.

Normative Beliefs and IPV

Normative beliefs or “self-regulating beliefs about the appropriateness of social behaviours” have been theorised to be a primary determinant of aggressive behaviour (Huesmann & Guerra, 1997, p. 408). Adding to a multifactorial understanding of IPV, Huesmann (1988) highlights that individual normative beliefs develop early on in life and are the product of learning experiences facilitated through both one’s own behaviour (enactive learning), and the behaviour of others (observational learning). Over time, normative beliefs are said to ‘crystalize’; they become more stable, and less susceptible to situational influences. Normative beliefs can be situation specific (e.g., it is okay to hit someone if they hit you first) or general (e.g., it is not okay to hit others). Through socialisation processes, prevailing societal norms about IPV are likely internalised and thus, individual normative beliefs are often congruent with those of the wider community. However, Huesmann and Guerra (1997) highlight that this may not always be the case. For example, children who frequently observe their fathers hitting their mothers are more likely to adopt a normative belief condoning the use of violence towards women, despite wider societal norms and external sanctions that may prohibit this behaviour (Felson & Feld, 2009). Therefore, exposure to IPV in one’s immediate context may be more influential than prevailing social norms, and thus, more predictive of future aggression.

Like many recent theories of aggression, Huesmann (1988) emphasises the central role of cognition in the maintenance of aggressive behaviour across time and situations.

Adopting an information processing model to understanding human aggression, Huesmann (1988) postulates that when individuals encounter a social problem they search their memory for scripts, or mental structures, to guide their behaviour. These cognitive scripts suggest how a person should behave in each situation and relay the likely outcome of their desired behaviour. Through an evaluation process, he argued that behaviours suggested by scripts are filtered through an individual's normative beliefs. Thus, normative beliefs serve a critical role in regulating aggressive behaviour, by prescribing what behaviours are acceptable and unacceptable in certain situations. Therefore, for IPV to occur, an individual must hold a normative belief supporting the use of violence, and view violence as an appropriate response. Indeed, research has provided empirical support for Huesmann's (1988) conceptual links between normative beliefs and human aggression. For example, in a longitudinal study of 1,015 elementary school children, it was found that children's approval of interpersonal violence was significantly correlated with their own use of aggression (Huesmann & Guerra, 1997). This suggests that changing people's normative beliefs is a critical step for predicting longitudinal changes in relational aggression (Nixon & Werner, 2010).

The Effect of Provocation

Research has consistently demonstrated the importance of provocation, such as physical or verbal aggression, in eliciting interpersonal violence (e.g., Berkowitz, 1989; Felson, Savolainen, Hughes, & Ellonen, 2015). Huesmann's (1988) information processing model outlines that internalised norms prohibiting aggression may be greatly reduced when others are observed behaving aggressively. Indeed, research suggests that provocation provides justification for aggression and thus, increases an individual's likelihood to respond to victimisation with aggression through this mechanism (Bettencourt & Miller, 1996). This

reciprocity norm exerts a powerful influence in intimate relationships where conflict is likely to occur (Bettencourt & Miller, 1996).

In a meta-analytic review of 64 experimental studies, Bettencourt and Miller (1996) found that provocation moderated gender differences in aggression; whilst men were more aggressive than women under neutral conditions, provocation attenuated these differences. It is argued that women behave less aggressively compared to men under neutral conditions because gender role norms inhibit the use of female aggression, however, provocation provides justification for aggression and thus, frees women from such constraints (Bettencourt & Miller, 1996). The authors also found significant gender differences in aggression based on provocation type. For example, they found that men behaved more aggressively than women when physically attacked, however, women behaved more aggressively than men when verbally attacked. In a similar study conducted by Forbes, Jobe, White, Bloesch, and Adams-Curtis (2005), it was found that participants justified – and thus, were more approving of – a person’s use of physical violence following sexual betrayal compared to a non-sexual betrayal, as depicted in vignettes. Taken together, these findings suggest that situation-specific normative beliefs may lead individuals to be more accepting of violence under various levels of provocation. Despite these findings, research has predominantly focused on gender differences in approval and use of violence in the absence of provocation. Therefore, the current study expands on existing literature by examining participants’ approval of physical IPV under various levels of provocation.

Ambivalent Sexism Theory

Although there is a consensus that sexism exists in society, some researchers have reconceptualised how sexism is viewed, highlighting the idea that it is not always expressed as a reflection of hostility towards women (Ibabe, Arnosó, & Elgorriaga, 2016). The

ambivalent sexism theory (Glick & Fiske, 1996) posits that sexism is a multidimensional construct encompassing two sets of sexist attitudes with opposing valences: hostile sexism and benevolent sexism. Hostile sexism is an antagonistic attitude towards women characterised by negative stereotypes that view women as inferior, and justify male structural power (i.e., women try to control men through feminist ideology or sexual seduction; Glick & Fiske, 1996). Benevolent sexism shares common assumptions with hostile sexist beliefs, such as restricting women to traditional gender roles and implying they are the “weaker” sex, however, the attitudes displayed feel favourable (i.e., women are weak and therefore should be protected by men; Glick & Fiske, 1996). Although benevolent sexism elicits positive affective tones, it is argued that both hostile and benevolent sexism serve to justify male structural power and maintain gender inequality (Glick, Sakalli-Ugurlu, Ferreira, & de Souza, 2002).

Where there are two competing groups in society, and one holds power over the other, hostility typically results (e.g., racism). However, gender provides a unique exception to this rule because although men’s size and strength may lead them to hold power over women, sexual reproduction lends women dyadic power by which men depend on women for child rearing, sexual reproduction, and intimacy-seeking (Glick & Fiske, 1996). This interdependence gives rise to ambivalent sexist attitudes towards members of the opposite sex. It is argued that women also respond to the simultaneous influences of male structural power and female dyadic power by holding hostile (e.g., men act like ‘babies’ when they are sick) and benevolent (e.g., men are less likely to fall apart in emergencies than women are) sexist attitudes towards men (Glick & Fiske, 1999).

Although both components of ambivalent sexism appear polarising in nature, research indicates that they are indeed strongly positively correlated at the individual and national

level of analysis (Glick & Fiske, 1996). Hence, individuals can simultaneously hold both hostile and benevolent sexist attitudes towards members of the opposite sex. According to Glick and Fiske (1996), sexist individuals can hold a seemingly dissonant set of beliefs because they categorise women into two groups. One group, the favoured group, consists of women who conform to traditional gender roles, and help to justify and reinforce male structural power (e.g., housewives). The other group, the disfavoured group, consists of women who violate traditional gender roles and are perceived as challenging male dominance (e.g., feminists). This dichotomous distinction of women based on their behaviour can lead men to maintain a sense of attitudinal consistency, by postulating that some women can be liked whilst others can be disliked (Glick & Fiske, 1996). Therefore, women who are perceived as adopting unconventional gender roles are met with hostility and are no longer viewed as deserving of men's protection. Indeed, research supports that sexism is generally expressed in hostile ways to members of the opposite sex who deviate from traditional gender roles (Glick, Diebold, Bailey-Werner, & Zhu, 1997; Glick & Fiske, 1999).

A growing body of literature exists that reveals the relationship between hostile sexism and different forms of gender-based violence: such as victim blaming and perpetrator exoneration of physical violence in intimate relationships (Valor-Segura, Exposito, & Moya, 2011), positive attitudes towards wife beating (Sakalli, 2001), and justification of physical violence in a relationship after betrayal (Forbes et al., 2005). Valor-Segura et al. (2011) investigated the influence of ambivalent sexism, and just world beliefs on perceiver's judgements about relational physical aggression. The authors found that participants high in hostile sexism were more likely to blame the victim and exonerate the perpetrator. This was particularly evident in male participants who tended to endorse these attitudes more than female participants. This is concordant with research that finds men hold more traditional

ideologies and minimise perceptions regarding the seriousness of IPV (Ibabe et al., 2016; Sakalli, 2001). Furthermore, research suggests that younger populations internalise sexist attitudes and beliefs more readily than older populations since the complex nature of female dyadic power and male structural power is unlikely to be understood or developed at this stage (Glick & Fiske, 1996). Arguably, this is one of the contributing factors for the disproportionately high rates of IPV in younger populations highlighted earlier in the New Zealand and international statistics. Interestingly, Valor-Segura et al. (2011) also reported a general propensity to blame the victim and exonerate the perpetrator when no specific cause of violence was mentioned. In such instances, it is argued that the ambiguity of the situation may provide opportunity for sexist ideologies internalised by perceivers to be expressed, subsequently leading to justification of the aggression (Frese, Moya, & Megias, 2004).

Conversely, benevolent sexism is expressed to individuals who are perceived to fit traditional gender roles (Glick & Fiske, 1999). Although findings appear mixed, there is momentous support to imply that benevolent sexism may act as a protective factor for women against male perpetrated IPV (e.g., Allen, Swan, & Raghavan, 2009; Sakalli, 2001). For example, Sakalli (2001) investigated beliefs about wife beating in Turkish college students and found that benevolent sexism was a significant predictor of men's greater negative attitudes towards wife beating. Since benevolent sexism is about the purity of women (i.e., protecting and helping women), then it may provide a protective effect through the mechanism of holding men responsible for their aggression (Sakalli, 2001). In support of this, Allen et al. (2009) also found that women who endorsed benevolent sexism were less likely to report victimisation. Similarly, the authors reported that men who endorsed benevolent sexism were less likely to report perpetration of IPV.

Despite the inherent appeal of benevolent sexism, some research exists that challenges the notion of its ability to provide a protective effect. For example, Yamawaki, Ostenson, and Brown (2009) found that benevolent sexism was also predictive of victim blaming of domestic assault in Japanese and American college students. Arguably, this is because the woman in each scenario were viewed to have violated traditional gender roles, thus leading participants scoring high on benevolent sexism to blame the victim (Yamawaki et al., 2009). Indeed, cases of domestic violence portrayed by the mass media often depict situations in which women are challenging traditional gender roles and stereotypes (Viki & Abrams, 2002). Hence, the promise of protection for women is contingent upon their subjugation and acceptance of a subordinate status in society. Moreover, in cases where the aggression is “justified”, or the women’s behaviour is viewed as inappropriate, benevolent sexism is arguably irrelevant and thus, its promise of protection appears ultimately hollow (Glick et al., 2002).

Thus, both sexist ideologies can be viewed as complementary tools of control, however, due to the simultaneous existence of women’s dyadic power and men’s structural power, it is not fruitful for men to be overtly hostile towards women. Therefore, it is argued that in Western societies sexism is overtly expressed in benevolent ways to both genders (Felson, 2002; Glick et al., 2000). Indeed, cross-cultural and historical evidence indicates that the social ideology through which society responds to women’s dyadic power is by expressing protective attitudes towards women (i.e., benevolent sexist attitudes; Guttentag & Secord, 1983). Likewise, Glick et al. (2000) found that countries in which men tend to endorse hostile sexism are those in which women most strongly embrace benevolent sexism, arguably for the promise of protection it appears to offer. Moreover, Glick et al. (2002) found that women tend to reject hostile sexism more than men, but accept benevolent sexism

equally as much, or more, than men. However, research into ambivalent sexist attitudes towards men and its relationship to IPV is in its infancy; rather, the focus has been predominately on sexist attitudes towards women and its role in IPV (Glick & Fiske, 1999). The current study focuses on ambivalent sexist attitudes towards women, investigating its relationship to approval of IPV, and changes in sexism after exposure to primary prevention campaigns.

The role of ambivalent sexism in IPV. The gendered theory would expect elevated levels of hostile sexism to be related to elevated levels of approval of male to female aggression. Moreover, as the use of female violence is only considered a direct response to male violence or used as a pre-emptive means, there is no need to educate the public or target mechanisms through prevention campaigns driving female to male violence. From this perspective, there is a need to re-educate men and poster campaigns should depict male to female aggression as not okay.

An alternative theoretical framework to the gendered theory that explains the equal rates of IPV in society is offered by Felson (2000) who argues that whilst sexism does occur, beliefs in the Western world about IPV are chivalrous, or benevolently sexist, not patriarchal. Felson (2002) defines chivalry as a “norm that discourages men from harming women and encourages others to protect them” (p. 64). For example, it is not okay for men to hit women as women need men’s protection and are the weaker sex. Despite the extensive base of research that points to men’s greater proclivity to use violence, the consistent finding that men are equally, or more, likely to be victims of physical IPV presents an interesting paradox. Felson (2002) argues that this is the product of a societal norm that inhibits male violence against women. Indeed, a growing body of literature exists that suggests the predominant belief expressed in Western cultures reflects that of benevolent sexism, and that

violence by men against women is perceived as less acceptable than violence by women against men (e.g., Felson, 2002).

Felson and Feld (2009) used a representative American sample to examine whether gender and marital status of the victim and perpetrator of IPV affect whether people think the police should be notified of the incident. The results revealed that third parties were more likely to advocate notifying the police when the perpetrator was a man, regardless of marital status. Similarly, there was greater moral condemnation of male to female violence, and beliefs that women were in greater danger (despite controlling for levels of injury). Conversely, respondents appear to compartmentalise violence perpetrated by females as the special inhibitions that govern perceptions of male perpetrated IPV are not upheld to the same degree when the perpetrator is a woman (Felson, 2010; Felson & Feld, 2009). Likewise, Hilton, Harris, and Rice (2000) explored the functions of aggression among male high school students and observed significant differences in self-reported victimisation and perpetration rates between females and males. Concerning male to male violence, it was found that perpetrator reports matched that of victim reports. On the contrary, reports examining male to female violence revealed that males self-reported perpetration rates were lower than females self-reported victimisation. This discrepancy between male and female self-reports is indicative of an underlying chivalrous norm that views male to female violence as a deviant behaviour (Hilton et al., 2000).

If chivalry (i.e., benevolent sexism) is the societal norm in Western cultures, then campaigns trying to educate the public that violence to women is not okay are at best simply reinforcing the existing chivalrous belief to the masses. At face value, this may not be perceived as a problem, however, it has been suggested that whilst chivalry may decrease acceptance of male violence towards women, it may serve to increase acceptance of female

violence towards men. Indeed, research suggests that women are more likely to initiate IPV if they believe the chivalrous norm will prevent men from retaliating (Fiebert & Gonzalez, 1997). Therefore, strengthening existing benevolent sexist beliefs through campaigns that portray women as victims only may be serving to encourage the use of female aggression as it is presumed it is trivial and not injurious (Fiebert & Gonzalez, 1997). This may explain the often found higher or equal rates of female to male IPV. Indeed, research suggests that one of the biggest risk factors for victimisation is one's own use of aggression in the first instance (Stith et al., 2004), which would explain the equal rates of IPV commonly found between the sexes.

Consequently, this raises the question of what attitudes and beliefs the media messages in campaigns should target. From a gendered perspective, hostile sexism and patriarchal beliefs drive IPV and thus, campaigns should depict male to female aggression as not okay. However, Felson (2002) suggests that sexism impacts on IPV in a different way - that benevolent sexist attitudes prevail. Therefore, the current study set out to explore these theoretical discrepancies by measuring participants' approval of male and female perpetrated IPV, and its links to sexism.

Whilst we want to educate society about the prevalence and causes of IPV, it is important that media messages also carefully consider how they may shape people's attitudes while doing so. As it stands, campaigns are primarily designed in accordance with the gendered theory. This is despite methodologically sound evidence failing to demonstrate the empirical links between a patriarchal ideology and IPV and opposing views about the relationship between sexism and approval having been put forward by authors such as Felson (2002). Therefore, the current study set out to explore the effects of campaign exposure on participants' approval of IPV and sexism. From a gendered perspective, we would expect

campaigns depicting male to female violence to reduce men's hostile sexism and approval of violence to women. However, according to Felson (2002), advertising women as victims of IPV and men as perpetrators may serve to increase or maintain benevolent sexism to women which may inadvertently increase reciprocal aggression in some relationships. Likewise, Glick and Fiske (1996) highlight that hostile sexism is most relevant when sexes are not conforming to traditional gender roles. This may be the case when women are portrayed as perpetrators and men as victims in heterosexual relationships. Therefore, it is important to test the effects of portrayed gender roles in media campaigns on people's endorsement of sexism and approval of IPV. Currently, no test of these messages in a lab situation exists.

Thesis Aim

This study aims to investigate whether manipulating the traditional gender roles of men and women experiencing IPV in simulated media campaigns impacts on participants' level of sexism and approval of IPV. This will be examined across two studies. Study one consisted of two parts and employed a pre-post within-subjects experimental design. Study one will examine the following hypotheses:

- 1a) Participants will approve of female to male violence more than male to female violence.
- 1b) Females will approve of both male to female and female to male violence less than males.
- 2) Participants higher in benevolent sexism will be less approving of male to female violence, but more approving of female to male violence.
- 3a) Exposure to posters depicting male to female violence will decrease approval of male to female violence for men (and not women, because they are at the floor of this measure).

3b) Exposure to posters depicting female to male violence will decrease approval of female to male violence for men and women.

4a) Exposure to posters depicting male to female violence will increase benevolent sexism.

4b) Exposure to posters depicting female to male violence will decrease benevolent sexism.

Study two is a replication of study one using an altered experimental design. Study two employed a between-subjects experimental design assessing participants' approval of IPV and sexism after exposure to campaigns. As such, study two will examine hypotheses three and four only.

Method

Participants

Study one. Participants were first year Bachelor's degree psychology students at Victoria University of Wellington. A total of 286 participants gave their consent to participate in part one of the study. Of these, 47 (16.4%) did not complete part two and were therefore excluded from analysis. A further 12 (4.2%) participants were excluded from the final dataset as they either began, but did not complete part two of the study ($n = 4$), answered more than one of the attention checks incorrectly ($n = 2$), did not have their ID code recorded ($n = 2$), or were deemed to have produced low quality responses ($n = 4$) determined by examining the quality of responses completed in less than 15 minutes (below two *SD*'s). This resulted in a final sample size of 227 participants, of which 157 (69.2%) were female and 70 (30.8%) were male. At the time of the study, participants' ages ranged from 17 to 45 years ($M = 18.77$, $SD = 2.58$). Of the sample, 132 (58.1%) identified as NZ European, 29 (12.8%) as NZ Māori, 27 (11.9%) as European, 17 (7.5%) as Asian, nine (4.0%) as Pasifika, four (1.8%) as Australian,

three (1.3%) as African, three (1.3%) as American, and three (1.3%) as Other. Twenty-seven percent of participants identified with more than one ethnic group. Regarding sexual orientation, 200 (88.1%) identified as heterosexual, 22 (9.7%) as bisexual, two (0.9%) as gay, two (0.9%) as lesbian, and one (0.4%) as other. Regarding relationship status, 148 (65.2%) were single, 45 (19.8%) were in a stable relationship lasting a month or longer (but not living together), 16 (7.0%) were cohabiting (in a relationship, living together), 15 (6.6%) were dating (but not living together), and three (1.3%) were married (spouse present). The majority of the sample (89.0%) identified themselves as living by Western cultural values, the remaining 25 (11.0%) did not.

Study two. Participants were first year Bachelor's degree psychology students at Victoria University of Wellington. A total of 400 participants gave their consent to participate in the study. Of these, six (1.5%) did not complete the study and were therefore excluded from analysis. A further 11 (2.8 %) participants were excluded from the final dataset as they either answered more than one of the attention checks incorrectly ($n = 2$) or were deemed to have produced low quality responses ($n = 9$). From the remaining 383 participants, three identified as other (regarding gender) and their data was removed to allow for sufficient gender comparisons. This resulted in a final sample size of 380 participants, of which 257 (67.6%) were female and 123 (32.4%) were male. At the time of the study, participants' ages ranged from 17 to 64 years ($M = 19.39$, $SD = 3.62$). Of the sample, 253 (66.6%) identified as NZ European, 43 (11.3%) as NZ Māori, 36 (9.5%) as Asian, 26 (6.8%) as European, nine (2.4%) as Pasifika, six (1.6%) as African, three (0.8%) as American, two (0.5%) as Australian, and two (0.5%) as Other. Twenty-seven percent of participants identified with more than one ethnic group. Regarding sexual orientation, 328 (86.3%) identified as heterosexual, 33 (8.7%) as bi-sexual, 10 (2.6%) as other, five (1.3%) as gay, and four (1.1%)

as lesbian. Regarding relationship status, 225 (59.2%) were single, 99 (26.1%) were in a stable relationship lasting a month or longer (but not living together), 26 (6.8%) were cohabiting (in a relationship, living together), 25 (6.6%) were dating (but not living together), and five (1.3%) were married (spouse present). The majority of the sample (94.2%) identified themselves as living by Western cultural values, the remaining 22 (5.8%) did not.

Materials

The following measures formed part of the study's questionnaires.

Ambivalent Sexism Inventory (ASI; Glick & Fiske, 1996). The ASI is a 22-item self-report questionnaire designed to measure hostile and benevolent components of sexism towards women. It was developed with the primary goal of addressing several limitations of existing sexism tools that often neglected to measure, or indirectly measured, benevolent sexism (Glick & Fiske, 1996). Each subscale is composed of 11 items. The benevolent subscale further taps into three subcomponents: Protective Paternalism (four items e.g., "A good woman should be set on a pedestal by her man"), Complementary Gender Differentiation (three items e.g., "Women, compared to men, tend to have greater moral sensibility"), and Heterosexual Intimacy (four items e.g., "Men are complete without women"). An example of a hostile item is: "Women are too easily offended." Participants express their level of endorsement for each item on a 7-point Likert scale ranging from -3 (*strongly disagree*) to 3 (*strongly agree*), with higher scores on the ASI indicating higher levels of sexism. The ASI is one of the most widely used tools for assessing sexism and has been cross-culturally validated in Turkish (Glick et al., 2002; Sakalli, 2001), Brazilian (Glick et al., 2002), and Japanese (Allen et al., 2009) populations comprising both college and community samples. Whilst the ASI was initially developed with student samples, Glick and Fiske (1996) reported that it showed its strongest predictive validity among non-student male

samples. Glick and Fiske (1996) reported acceptable reliability alphas for the hostile and benevolent subscales across six studies, ranging between .80 to .92 and .73 to .85, respectively. They noted that the lower reliability alphas for the benevolent subscale was unsurprising given the multidimensional nature of the scale. The ASI has also displayed good discriminant, convergent, and predictive validity. The ASI correlates well with other sexism measures including the Attitudes Towards Women Scale ($r = .63$; Spence & Helmreich, 1972), Modern Sexism Scale ($r = .57$; Swim, Aikin, Hall, & Hunter, 1995), and the Rape Myth Acceptance scale ($r = .54$; Burt, 1980). Reliability analyses were carried out using Cronbach's Alpha (which is the most commonly used measure for scale reliability; Field, 2013). Nunnally (1978) recommends an acceptable alpha threshold of .70, however, notes that lower alpha values are occasionally used and cited in literature. Good reliability alphas were also obtained for the ASI and its subscales across the two current studies: ASI .89 to .91; Hostile Sexism .89 to .91; Benevolent Sexism .79 to .82.

Beliefs about Relationship Aggression Scale (BaRAS-SV; Dixon, in preparation).

The BaRAS is a self-report questionnaire which uses brief vignettes to assess participants' beliefs pertaining to physical violence committed by both sexes in intimate heterosexual relationships. Research demonstrates that direct yes/no questions evoke socially desirable responses (Sorenson & Taylor, 2005). To reduce this artifact, the BaRAS utilises a full factorial design, and employs a combination of survey and experimental methods. The original scale uses a 2x6x2 factorial design, creating 24 vignettes in total. A shortened version (SV) of the BaRAS was adopted for the current study. The BaRAS-SV consists of 12 vignettes. Three factors are used to produce the 12 vignettes, these are: (a) sex of the aggressor (male or female), (b) levels of provocation from the victim (none, sexual infidelity, and physical violence), and (c) severity of physical aggression from the perpetrator (minor

e.g., a slap, or severe e.g., repeatedly punched in the face and body).

Hence, the questionnaire integrates a 2x3x2 factorial design, allowing for comparisons across the independent variables of interest. Vignettes are introduced as depicting an average sized woman and an average sized man who have been in a monogamous intimate relationship for over 12 months. Eight questions are immediately asked following each scenario, resulting in a total of 96 questions. An example vignette and the eight accompanying questions are presented below. This scenario depicts a female perpetrator and male victim, no provocation, and a minor act of physical violence, followed by the eight questions:

Carol has had a stressful day at work. That evening when John was sitting on the sofa watching television she approached him and slapped him across the face.

- 1) To what extent do you approve of (the perpetrator's) actions?
- 2) To what extent do you think (the perpetrator's) behaviour was abusive?
- 3) How likely is it that (the victim) will be physically injured, requiring medical treatment?
- 4) How likely is it that (the victim) will be greatly emotionally distressed?
- 5) How likely is it that (the victim) can defend (himself/herself) against (the perpetrator)?
- 6) How much should (the perpetrator) be punished for what (she/he) did?
- 7) How much should (the victim) be assisted by services that provide help for victims in the community in the aftermath of violence in an intimate relationship?
- 8) Use the slider to show how you think each of the following dimensions best represent (the perpetrator's) character. Move the slider closest to the word you think best represents (her/him) for each question.

- a. Friendly – Unfriendly
- b. Hostile – Peaceful
- c. Likeable – Unlikeable
- d. Nice – Mean
- e. Good – Bad

Participants rate questions one to seven on a 5-point Likert scale from 0 (*not at all*) to 4 (*definitely*). Question eight is an adaptation of a measure of perceived aggressor characteristics designed by Hammock, Richardson, Lamm, Taylor, and Verlaque (2016). Participants rate the aggressor in each scenario on a series of traits with responses measured on a bipolar 8-point slider scale e.g., 0 (*friendly*) to 7 (*unfriendly*).

Previous studies employing the BaRAS have displayed acceptable alpha values ranging from .81 to .90. This study analysed responses to question one (approval of perpetrator's actions) only. Cronbach's alpha was calculated for two scores in study one and study two respectively: Approval of male aggression .68 to .71; Approval of female aggression .68 to .75. Despite not reaching a recommended alpha threshold of .70 in study one, Nunnally (1978) suggests that in the early stages of research, values as low as .50 are sufficient. As the BaRAS-SV is still in the early stages of development this suggests that acceptable alpha values were obtained and approached the widely accepted alpha value of .70.

Posters. Four posters were created for the current study (see Appendix A). The images produced were based on a review of existing poster campaigns to ensure that participants were not exposed to images that they would not encounter in their daily lives via domestic violence campaigns. Of these, two posters depicted acts of interpersonal aggression, namely: a male aggressor, and a female aggressor. The other two posters depicted a nonviolent image with people, and a non-violent image: no people, which acted as controls in

study two. Poster text (*'Domestic Violence. It's not ok'*) was held constant across each image to control for any effects of poster text. All other variables except for the aggressor's gender were held constant to allow for causal attributions of changes in participants' perceptions to the manipulations of the aggressor's gender.

Procedure

This research was approved by the School of Psychology Human Ethics Committee before data collection commenced (project # 24324). The ASI and the BaRAS-SV were counterbalanced to control for any practice effects. Vignettes within the BaRAS-SV were also randomized to further minimize this extraneous variable. Three separate survey links were created for each gender, namely: female, male, and other to ensure relatively even distribution of counterbalanced surveys to allow for sufficient gender comparisons across poster condition.

Study one. This study was divided into two parts and participants were required to complete both parts of the study.

Part one (pre-exposure). Participants were recruited through the Introduction to Psychology Research Programme (IPRP) hosted by the School of Psychology at Victoria University of Wellington. The study was advertised to students through sona-systems whereby students could voluntarily sign up for the study individually in exchange for course credit. A description of the study was provided, informing participants that the study was the first part of a two-part online study and students would have to return at a later date in order to complete part two. There were no restrictions placed on participating in part one.

After signing up to the study, participants were provided with an anonymous link to the survey which redirected them to Qualtrics, an online survey tool. Participants were presented with an information and consent form (see Appendix B) which provided

prospective participants with a brief introduction to the research topic and outlined what would be expected from them should they wish to participate. The contact details and free helpline numbers of local and national services were provided at this point, should participants wish to seek advice about any of the related issues discussed, regardless of whether they went on to participate. Informed consent was obtained by checking the box agreeing to participate in the research. Those that did not wish to partake in the study were advised to exit the browser at this stage. Participants were informed that they could stop participating at any time, without giving a reason, up until submission of the completed questionnaire.

Participants were then presented with a series of online windows containing the study questionnaire. Demographic information was collected before the measures outlined above were displayed. All questions were designed according to the forced entry method meaning that participants were required to answer each question before moving on to the next one. Attention checks were added to the first vignette of the BaRAS-SV to ensure the quality of participants' answers. The study took approximately 30 minutes to complete. Upon completion of the questionnaire, participants received 0.5 research credits towards their final grade.

To ensure confidentiality, an embedded survey identification number was used to represent the information provided by each participant. Participants were notified that they would be contacted by the researcher in due course when they were eligible to complete part two of the study.

Part two (post-exposure). Approximately one week after closure of part one of the study, part two was made available through sona-systems and participants were notified by email that they were eligible to participate. Participants were only eligible to participate if

they had completed part one. Part two of the study was made available to participants for eight weeks, in which the study could be completed. This was to ensure that a sufficient sample size was collected, so that valid gender comparisons could be made. Hence, participants had between a one-week to eight-week period between completion of part one and part two of the study. However, on average, participants had an eighteen-day break between completion of both parts of the study.

As in part one of the study, participants accessed an anonymous survey link which redirected them to Qualtrics. An information and consent form (see Appendix C) was then displayed to participants, which reiterated the study information and contact details of numerous services provided prior to participating in part one. Informed consent was obtained again by checking the box agreeing to participate in this research. Those that did not wish to partake in part two of the study were advised to exit the browser at this stage.

Participants were then informed that they were going to view an image from a public awareness campaign. Images were randomized so that participants were allocated to only one of four images (see Appendix A). Each image was displayed on screen for one minute before participants were able to advance, which was indicated by an on-screen timer. To ensure participants were engaging with the images, they were informed that they would be asked about their thoughts on the image at a later point in the survey. Participants went on to complete the online questionnaire as in part one.

Prior to participants viewing the online debriefing statement, they were asked questions pertaining to the images presented earlier in the study. This included asking participants to choose which response best described the image previously viewed, and what was the text on the image that was presented.

At the end of the survey, participants were thanked and were debriefed as to the purpose of the study (see Appendix D). Contact details and free helpline numbers were provided again, should participants wish to seek advice about any of the related issues discussed. At the end of the debriefing statement participants were asked about the level of distress they had experienced during the study, and the likelihood of accessing the relevant services provided. Upon completion of the questionnaire, participants received 0.5 research credits towards their final grade.

Study two. This study was designed to replicate study one using a cross-sectional experimental design. The key differences in study design are highlighted below. Prospective participants were eligible to participate in the study if they had not participated in study one. There were no other restrictions to participation. Participants were firstly presented with an information and consent form (see Appendix E). After demographic information was collected, participants were informed that the next stage of the survey involved viewing a poster that may depict interpersonal aggression between a man and a woman, and then answering some questions about the poster. Participants viewed one of four images: (a) a male aggressor, (b) a female aggressor, (c) a non-violent image with people, and (d) a non-violent image: no people, creating four groups for comparison. Participants were required to answer questions about the poster whilst it was displayed on screen for one minute before they were able to advance. This included asking participants to describe what was happening in the poster and sharing their thoughts and feelings about the perpetrator and victim (if applicable). Participants then completed the study questionnaire as in study one and were awarded 0.5 research credits towards their final grade upon completion.

Treatment of Data

Power analysis was conducted to determine appropriate sample sizes for the two current studies. For study one, using a within-subjects experimental design, power analysis

determined that 225 participants would be needed to achieve a medium-sized effect size, $\eta_p^2 = .09$ (Cohen, 1988), at 80% power. For study two, using a between-subjects experimental design, power analysis determined that 400 participants (100 per poster condition) would be needed to achieve the same medium effect size at 80% power. Both estimates allowed for any potential dropouts.

Study one.

Hypothesis one a: Participants will approve of female to male violence more than male to female violence.

Hypothesis one b: Females will approve of both male to female and female to male violence less than males. Two scores were created from the BaRAS-SV questionnaire to calculate participants' approval of male and female aggression. To create these scores, an average value was calculated from responses to question one (approval of perpetrator's actions) across each of the six scenarios (that differed in severity and provocation type) to produce a total score for approval of a male hitting their female partner and for a female hitting their male partner. Hence, two average approval scores were produced for each participant ranging from 0 (*not at all*) to 4 (*definitely*). A 2 (participant's gender: male or female) x 2 (aggressor's gender: male or female) mixed ANOVA with repeated measures on the aggressor's gender variable was then conducted. Effect sizes were calculated using η_p^2 with .01 representing a small effect, .09 a medium effect and, .25 a large effect (Cohen, 1988). *Post-hoc* repeated measures and between-subjects ANOVAs were conducted with a Bonferroni correction creating a new alpha ($\alpha = .025$) to control for Type 1 errors.

Hypothesis two: Participants higher in benevolent sexism will be less approving of male to female violence, but more approving of female to male violence. The two scores created from the BaRAS-SV capturing total approval of male aggression and female

aggression were utilised here. These scores were also further divided into three scores capturing approval of IPV at the various levels of provocation (infidelity, physical, and none). To create these six scores, an average value was calculated from responses to question one (approval of perpetrator's actions) across each level of provocation from the victim. Hence, in total, eight approval scores were produced for each participant ranging from 0 (*not at all*) to 4 (*definitely*). Two scores indicating participants' endorsement of hostile sexism and benevolent sexism were created from the ASI. Six items were reverse coded (-3 = 3, -2 = 2, -1 = 1, 0 = 0, 1 = -1, 2 = -2, 3 = -3) before calculating an average endorsement score for the hostile sexism and benevolent sexism items. Thus, participants could achieve two sexism scores capturing their endorsement of hostile sexism and benevolent sexism towards women ranging from -3 (*strongly disagree*) to 3 (*strongly agree*). These scores were centred, and two interaction terms were computed: gender x benevolent sexism and gender x hostile sexism. Multiple linear regression analyses were then conducted to develop a model for examining the relationship between participants' approval of male and female aggression from their hostile sexism scores, benevolent sexism scores, gender, and interactions between gender and sexism. Tests of simple slopes were then conducted to further examine the significant gender interactions.

Hypothesis three a: Exposure to posters depicting male to female violence will decrease approval of male to female violence for men (and not women, because they are at the floor of this measure).

Hypothesis three b: Exposure to posters depicting female to male violence will decrease approval of female to male violence for men and women. The two scores created from the BaRAS-SV capturing total approval of male aggression and female aggression were utilised here. Another two scores were created in the same way (see hypothesis one) to

measure total approval of male and female aggression after campaign exposure. Similarly, scores capturing post-exposure approval of female and male aggression at each level of provocation (infidelity, physical, and none) were created (see hypothesis two). Post-exposure measures in approval were used as the dependent variables. Dummy variables were created to represent each poster condition (0 = did *not* see, 1 = did see), which were compared to the non-violent control image: no people. The dummy codes for a poster depicting male aggression and female aggression were entered into the regression model. Two interaction terms were computed: gender x dummy code male aggression and gender x dummy code female aggression before being entered into the regression model. Multiple linear regression analyses were then conducted to develop a model for examining the relationship between participants' post-exposure approval of male and female aggression from their pre-exposure total approval scores, gender, poster condition, and the interaction between gender and poster condition.

Hypothesis four a: Exposure to posters depicting male to female violence will increase benevolent sexism.

Hypothesis four b: Exposure to posters depicting female to male violence will decrease benevolent sexism. The two scores created from the ASI, indicating participants' endorsement of hostile sexism and benevolent sexism, were utilised here. Another two scores representing post-exposure endorsement of hostile and benevolent sexism were created in the same way (see hypothesis two) and were used as the dependent variables. The dummy variables and interaction terms created for hypothesis three were also utilised here (see above). Multiple linear regression analyses were then conducted to develop a model for examining the relationship between participants' post-exposure benevolent and hostile sexism scores from their pre-exposure sexism scores, gender, poster condition, and the interaction

between gender and poster condition. Tests of simple effects were then conducted to further examine the significant gender interactions.

Study two.

Hypothesis three a: Exposure to posters depicting male to female violence will decrease approval of male to female violence for men (and not women, because they are at the floor of this measure).

Hypothesis three b: Exposure to posters depicting female to male violence will decrease approval of female to male violence for men and women. Eight new scores were created from the BaRAS-SV questionnaire to calculate participants' total approval of male and female aggression, and approval at each level of provocation (infidelity, physical, and none) after campaign exposure (see hypothesis one and two). These variables were the dependent variables. Dummy variables were created in the same way as study one to represent each poster condition (see hypothesis three above). The dummy codes for a poster depicting male aggression, female aggression, and a non-violent control image with people were entered into the regression model. Three interaction terms were computed: gender x dummy code male aggression, gender x dummy code female aggression, and gender x dummy code non-violent control image with people before being entered into the regression model. Multiple linear regression analyses were then conducted to develop a model for examining the relationship between participants' post-exposure approval of male and female aggression from their gender, poster condition, and the interaction between gender and poster condition.

Hypothesis four a: Exposure to posters depicting male to female violence will increase benevolent sexism.

Hypothesis four b: Exposure to posters depicting female to male violence will decrease benevolent sexism. The same variables and regression procedures as with hypothesis three (see directly above) were employed here, however, post-exposure hostile and benevolent sexism scores were the dependent variables.

Results

Study One

Study one employed a pre-post within-subjects experimental design and examined hypotheses 1-4. The main findings for each hypothesis will be presented in turn.

Hypothesis one a: Participants will approve of female to male violence more than male to female violence.

Hypothesis one b: Females will approve of both male to female and female to male violence less than males.

Assumption testing. The normality assumption was assessed by examining histograms and the skewness and kurtosis for each of the dependent variables. For approval of male aggression results revealed a skewness of 2.28 ($SE = 0.19$) and a kurtosis of 5.65 ($SE = 0.39$) for females, and a skewness of 1.92 ($SE = 0.29$) and a kurtosis of 5.46 ($SE = 0.57$) for males. For approval of female aggression results revealed a skewness of 1.08 ($SE = 0.19$) and a kurtosis of 0.83 ($SE = 0.39$) for females, and a skewness of 0.83 ($SE = 0.29$) and a kurtosis of 0.68 ($SE = 0.57$) for males. Additionally, Shapiro-Wilk's test of normality was conducted and revealed that approval of male aggression for females, $D(157) = 0.71$, $p < .001$, and males, $D(70) = 0.82$, $p < .001$, and approval of female aggression for females, $D(157) = 0.90$, $p < .001$, and males, $D(70) = 0.94$, $p = .002$, were significantly non-normal. Thus, the normality assumption was violated, however, Field (2013) reports that ANOVAs are robust to violations of normality when the sample size is large ($N = 30$). Furthermore, given the nature of this study it was expected that the data would be non-normally distributed. The

assumption of sphericity was met as there were only two levels of the within-subjects variable. The assumption of homogeneity of covariance was assessed using Box's M test, which was found to be non-significant ($p = .060$), thus meeting the assumption. Levene's test, which is based on the median as it is more robust to outliers (Field, 2013), indicated equal variances for males' and females' approval of male aggression, $F(1, 225) = 0.61, p = .435$. However, heterogeneous variances were found for males' and females' approval of female aggression, $F(1, 225) = 4.94, p = .027$, thus violating the homogeneity of variance assumption. Field (2013) notes that ANOVAs are robust to violations of homogeneity of variance when the sample size is large, and that in large samples Levene's test can often be unreliable as it can be significant even when group variances are not very different. We also assessed for the presence of outliers and identified three outliers which were high in both approval of male and female aggression, however, removal of these data points did not change the results.

Model. To investigate the effect of participant's gender and aggressor's gender on approval of IPV, a 2x2 mixed ANOVA was conducted. Participant's gender (two levels: male or female) was the between-subjects factor and aggressor's gender (two levels: male or female) was the within-subjects factor. This analysis was conducted to provide a baseline measure for participants' approval of male and female perpetrated IPV, and as such measures approval prior to campaign exposure.

As expected (and depicted in Figure 1), the results revealed a statistically significant small main effect of participant's gender, $F(1, 225) = 7.37, p = .007, \eta_p^2 = .03$, whereby males approved of IPV, regardless of aggressor's gender, significantly more than females. A statistically significant large main effect of aggressor's gender was also observed, $F(1, 225) = 124.72, p < .001, \eta_p^2 = .36$. This effect indicates that regardless of participant's gender,

approval of female perpetrated IPV was significantly higher than approval of male perpetrated IPV, thus supporting our predictions. However, both of these main effects were qualified by a statistically significant interaction, $F(1, 225) = 5.18, p = .024, \eta_p^2 = .02$, representing a small effect, indicating that participant's gender has a significant influence on the approval of IPV depending on whether it was perpetrated by a female or male.

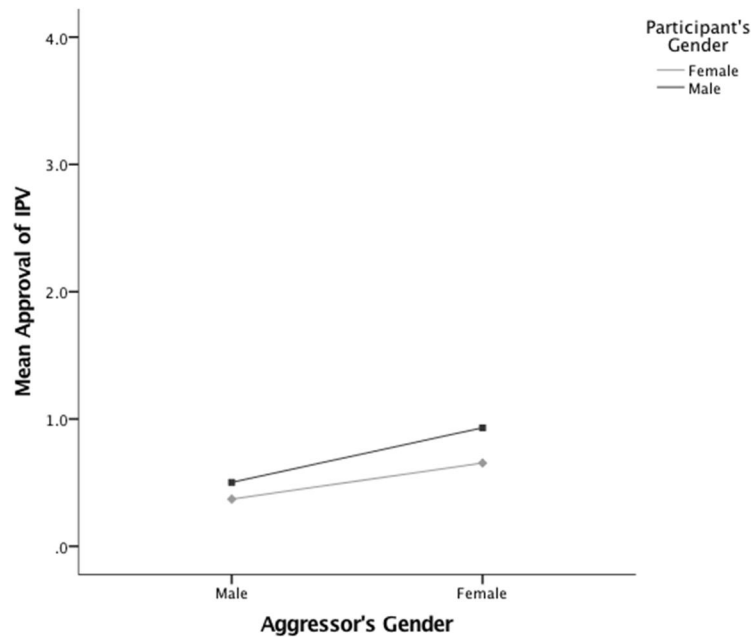


Figure 1. Male and female participants' mean approval of IPV perpetrated by a female and a male.

Note. The data represents approval in relation to a heterosexual relationship. Hence, where the aggressor is male, the victim is female and where the aggressor is female, the victim is male.

To unpack this interaction further, *post-hoc* repeated measures ANOVAs with a Bonferroni correction ($\alpha = .025$) revealed that both males and females approved of IPV significantly more when the aggressor was female compared to when the aggressor was male, $F(1, 69) = 53.48, p < .001, \eta_p^2 = .44$, representing a large effect; $F(1, 156) = 71.05, p < .001, \eta_p^2 = .31$, representing a large effect, respectively. Additionally, *post-hoc* between-subjects

ANOVAs with a Bonferroni correction ($\alpha = .025$) revealed that males ($M = 0.93$, $SD = 0.71$) approved of female perpetrated IPV significantly more than females ($M = 0.65$, $SD = 0.57$), $F(1, 225) = 9.85$, $p = .002$, $\eta_p^2 = .04$, representing a small effect. This suggests that whilst both males and females approved of female perpetrated IPV significantly more than male perpetrated IPV, approval was more pronounced for male participants. Regarding approval of IPV when the aggressor was male, there was no statistically significant difference between male and female participants, $F(1, 225) = 3.11$, $p = .079$, $\eta_p^2 = .01$, with both males ($M = 0.50$, $SD = 0.52$) and females ($M = 0.37$, $SD = 0.52$) reporting low levels of approval.

Hypothesis two: Participants higher in benevolent sexism will be less approving of male to female violence, but more approving of female to male violence.

Assumption testing. The assumption of multicollinearity was assessed by examining the correlations between each of the predictor variables. Preliminary examination revealed correlations below the recommended .70 threshold as suggested by Pallant (2013). Additionally, analyses revealed that all tolerance values and variance inflation factors (VIF) for each of the predictor variables were above the recommended .10 threshold for tolerance, and below the recommended value of 10 for VIF (Pallant, 2013), thus meeting the assumption of multicollinearity. The assumption of independent errors was met as the Durbin-Watson test revealed a value of 2.14, indicating a lack of autocorrelation. Examination of scatterplots, histograms, and P-P plots indicated possible violations of the assumptions of homoscedasticity, linearity, and normality. However, given the large sample size, violations of normality are unlikely to invalidate the confidence intervals and significance tests due to the central limit theorem (Field, 2013). To correct for these violations, a robust regression using bootstrapping to produce 95% Bias corrected accelerated (BCa) confidence intervals was performed. Robust regressions using bootstrapping do not

rely on the assumptions of normality or homoscedasticity (Field, 2013), and therefore, are appropriate for the current analyses.

Model. Multiple linear regression analyses were conducted to develop a model for examining the relationship between participants' approval of male and female aggression from their hostile sexism scores, benevolent sexism scores, gender, and interactions between gender and sexism. Exploratory analyses were conducted to test whether there were differences in approval of aggression at different levels of victim behaviour (no provocation, infidelity, and physical violence). As such, analyses revealing significant gender x sexism interactions will be highlighted below. Preliminary analyses examining gender differences in sexism at baseline revealed that, as expected, males tended to endorse more hostile sexism than females, $t(225) = 5.50, p = .001, d = 0.79$, however, there was no significant gender difference in endorsement of benevolent sexism, $t(225) = 1.58, p = .093, d = 0.24$. The following analyses explore the relationship between sexism and approval of IPV prior to campaign exposure.

Sexism and approval of male aggression. First, we explored the relationship between participants' approval of male aggression from their sexism scores, gender, and gender x sexism interactions. Basic descriptive statistics and zero-order correlations are summarized in Table 1, and the regression coefficients, intercept, and confidence intervals are presented in Table 2.

As shown on the left side of Table 2, there was a significant gender difference in the association between benevolent sexism and approval of male aggression when there was no provocation from the victim, representing a moderate sized effect size. As shown in Figure 2, tests of simple slopes indicated the more that females, $B = -0.11, SE = 0.04, t = -2.63, p =$

.009, 95% CI [-0.19, -0.03], but not males, $B = 0.13$, $SE = 0.07$, $t = 1.71$, $p = .089$, 95% CI [0.01, 0.27], endorsed benevolent sexism, the less they approved of male aggression when there was no provocation from the victim. Furthermore, comparing differences at points on the simple slopes revealed that at low levels of endorsement of benevolent sexism, females approved of male aggression significantly more than males, $B = -0.73$, $SE = 0.26$, $t = -2.79$, $p = .006$, 95% CI [-1.24, -0.22], however, at high levels of endorsement of benevolent sexism, males approved of male aggression significantly more than females, $B = 0.67$, $SE = 0.26$, $t = 2.56$, $p = .011$, 95% CI [0.16, 1.18]. The interaction between benevolent sexism and gender uniquely predicted just below 3% of the total variance for approval of male aggression: no provocation. There was no significant gender difference in the association between hostile sexism and approval of male aggression: no provocation (as depicted in Table 2).

In exploring the relationship between sexism and total approval of male aggression, and approval at the other levels of victim behaviour (infidelity and physical violence) no significant gender interactions were found for either benevolent sexism ($Bs = -0.10$ to 0.10 ; $ts = -0.01$ to 0.76 ; $ps > .381$) or hostile sexism ($Bs = -0.01$ to 0.07 ; $ts = -0.06$ to 0.53 ; $ps > .587$). Similarly, results revealed no overall link between benevolent sexism ($Bs = -0.03$ to 0.09 ; $ts = -0.44$ to 1.33 ; $ps > .213$) or hostile sexism ($Bs = 0.06$ to 0.08 ; $ts = 1.21$ to 1.56 ; $ps > .081$) in significantly predicting participants' total approval of male aggression and approval in the context of infidelity or physical provocation from the victim.

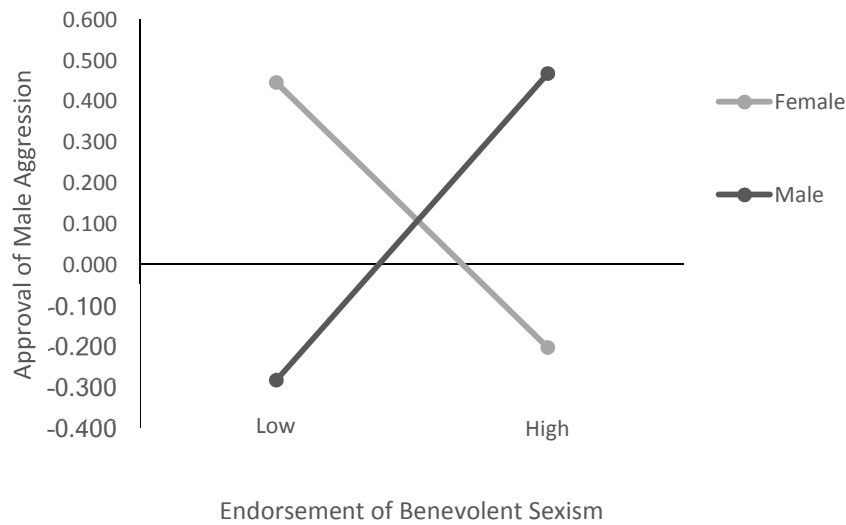


Figure 2. Male and female participants' approval of male aggression (no provocation) as a function of benevolent sexism.

Sexism and approval of female aggression. Following the same regression procedures described above, we explored the relationship between participants' approval of female aggression from their sexism scores, gender, and gender x sexism interactions. The descriptive statistics and correlations are summarized in Table 1, and the regression coefficients, intercept, and confidence intervals are presented in Table 2.

Table 1

Study One Descriptive Statistics and Correlations for Primary Measures

Variables	<i>M (SD)</i>	Zero-order correlations						
		1	2	3	4	5	6	7
1. Approval of Male Aggression: No Provocation	0.11 (0.50)	-						
2. Approval of Female Aggression: No Provocation	0.13 (0.53)	.43**	-					
3. Pre-Hostile Sexism	-0.86 (1.13)	.02	.05	-				
4. Pre-Benevolent Sexism	-0.75 (0.95)	-.05	.03	.52**	-			
5. Gender	-	-.00	.02	.34**	.11	-		
6. Post-Hostile Sexism	-0.89 (1.19)	.03	-.02	.86**	.55**	.27**	-	
7. Post-Benevolent Sexism	-0.84 (0.96)	.05	.05	.49**	.81**	.14*	.59**	-

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

Table 2

Summary of Model of Predictors of Approval of Male Aggression: No Provocation (left) and Female Aggression: No Provocation (right), with 95% Bias Corrected and Accelerated Confidence Intervals Reported in Parentheses. Confidence Intervals and Standard Errors Based on 1000 Bootstrap Samples (N =227)

Predictor Variables	Approval of Male Aggression: No Provocation					Approval of Female Aggression: No Provocation				
	<i>B</i> [95% <i>CI</i>]	<i>SE B</i>	<i>t</i>	β	<i>p</i>	<i>B</i> [95% <i>CI</i>]	<i>SE B</i>	<i>t</i>	β	<i>p</i>
Constant	0.11 [0.05, 0.17]	0.03	2.66	-	.008	0.14 [0.07, 0.23]	0.04	3.37	-	.012
Gender	-0.03 [-0.15, 0.11]	0.06	-0.36	-.03	.691	0.01 [-0.13, 0.20]	0.08	0.16	.01	.876
Benevolent Sexism	0.01 [-0.07, 0.09]	0.04	0.19	.02	.837	0.02 [-0.04, 0.11]	0.04	0.49	.04	.520
Hostile Sexism	0.03 [-0.02, 0.08]	0.03	0.72	.06	.288	0.01 [-0.04, 0.06]	0.03	0.24	.02	.679
Gender x Benevolent Sexism	0.23 [0.10, 0.40]	0.08	2.54	.22	.011	0.10 [-0.04, 0.27]	0.08	1.00	.09	.223
Gender x Hostile Sexism	-0.07 [-0.17, 0.03]	0.05	-0.85	-.07	.203	-0.08 [-0.18, 0.01]	0.05	-0.97	-.08	.112

Note. $R^2 = .04$; $R^2_{Adjusted} = .01$ (left). Gender was coded as -.5 = Female, .5 = Male. *B* = unstandardized regression coefficient; *SE B* = Standard error of the coefficient; β = standardized coefficient; CI = confidence interval

As shown on the right side of Table 2, there was no significant gender difference in the association between benevolent sexism or hostile sexism and approval of female aggression when there was no provocation from the victim. Similarly, neither benevolent sexism or hostile sexism were found to be significant predictors of approval of female aggression: no provocation.

In exploring the relationship between sexism and total approval of female aggression, and approval at the other levels of victim behaviour (infidelity and physical violence) no significant gender interactions were found for either benevolent sexism ($Bs = -0.31$ to -0.11 ; $ts = -1.59$ to -0.88 ; $ps > .191$) or hostile sexism ($Bs = 0.07$ to 0.16 ; $ts = 0.72$ to 1.24 ; $ps > .233$). However, results revealed that benevolent sexism was a significant predictor of participants' total approval of female aggression ($B = 0.14$, $t = 2.58$, $p = .013$) and approval in the context of infidelity ($B = 0.26$, $t = 3.54$, $p = .002$). As expected, this indicates that the more participants endorsed benevolent sexism, the more they approved of female aggression in these contexts. However, results revealed no overall relationship between benevolent sexism and approval of female aggression in the context of physical provocation from the victim ($B = 0.14$, $t = 1.41$, $p = .249$). Similarly, no overall relationship between hostile sexism and total approval of female aggression or approval at the other levels of victim behaviour (infidelity and physical violence) was found ($Bs = -0.01$ to 0.07 ; $ts = -0.17$ to 1.03 ; $ps > .330$).

These results lend partial support to our predictions, as we found a negative relationship between benevolent sexism and approval of male to female violence when there was no provocation from the female victim, for female participants. However, this was not the case for male participants. This suggests that females, and not males, higher in benevolent sexism were less approving of male to female violence in the context of no provocation. Concerning female aggression, it was found that benevolent sexism was a significant

predictor of participants' total approval of female to male violence and approval in the context of infidelity. This suggests that male and female participants higher in benevolent sexism will be more approving of female to male violence in these contexts, thus supporting our predictions. Overall, results indicate that approval of both male to female violence and female to male violence is driven primarily by benevolent sexism, not hostile sexism.

Hypothesis three a: Exposure to posters depicting male to female violence will decrease approval of male to female violence for men (and not women, because they are at the floor of this measure).

Hypothesis three b: Exposure to posters depicting female to male violence will decrease approval of female to male violence for men and women.

Assumption testing. The assumption of multicollinearity was met as each of the predictor variables correlated below the recommended .70 threshold (Pallant, 2013), and all tolerance values and variance inflation factors (VIF) were above .10 and below 10, respectively (Pallant, 2013). The assumption of independent errors was met as the Durbin Watson test revealed a value of 2.07, indicating a lack of autocorrelation. Examination of scatterplots, histograms, and P-P plots indicated possible violations of the assumptions of homoscedasticity, linearity, and normality. To correct for these violations, a robust regression using bootstrapping to produce 95% BCa confidence intervals was performed.

Model. Multiple linear regression analyses were conducted to develop a model for examining the relationship between participants' post-exposure approval of male and female aggression from their pre-exposure total approval scores, gender, poster condition, and the interaction between gender and poster condition. Exploratory analyses were conducted to test whether there were differences in approval of aggression at different levels of victim behaviour (no provocation, infidelity, and physical violence).

Exposure to male to female violence on approval. In exploring the effects of exposure to a poster depicting male to female violence, no significant gender x poster interactions were found to predict either approval of male aggression (total, no provocation, infidelity, or physical violence; $B_s = -0.04$ to 0.16 ; $t_s = -0.19$ to 0.67 ; $p_s > .535$) or approval of female aggression (total, no provocation, infidelity, or physical violence; $B_s = -0.13$ to 0.40 ; $t_s = 0.73$ to 1.33 ; $p_s > .219$). Similarly, no significant effect of poster condition was found to predict either approval of male aggression (total, no provocation, infidelity, or physical violence; $B_s = .06$ to 0.25 ; $t_s = 0.71$ to 2.16 ; $p_s > .063$) or approval of female aggression (total, no provocation, infidelity, or physical violence; $B_s = -0.00$ to 0.06 ; $t_s = -0.04$ to 0.38 ; $p_s > .735$). These results suggest that exposure to a poster depicting male to female violence did not statistically significantly impact on participants' approval of male aggression or female aggression, which does not support our prediction.

Exposure to female to male violence on approval. In exploring the effects of exposure to a poster depicting female to male violence, no significant gender x poster interactions were found to predict either approval of male aggression (total, no provocation, infidelity, or physical violence; $B_s = -0.14$ to 0.02 ; $t_s = -0.72$ to 0.10 ; $p_s > .469$) or approval of female aggression (total, no provocation, infidelity, or physical violence; $B_s = 0.06$ to 0.15 ; $t_s = 0.25$ to 0.66 ; $p_s > .517$). Similarly, no significant effect of poster condition was found to predict either approval of male aggression (total, no provocation, infidelity, or physical violence; $B_s = -.04$ to 0.14 ; $t_s = -0.56$ to 1.21 ; $p_s > .221$) or approval of female aggression (total, no provocation, infidelity, or physical violence; $B_s = -0.01$ to 0.17 ; $t_s = -0.05$ to 1.15 ; $p_s > .250$). These results suggest that exposure to a poster depicting female to male violence did not statistically significantly impact on participants' approval of male aggression or female aggression, which does not support our prediction.

Hypothesis four a: Exposure to posters depicting male to female violence will increase benevolent sexism.

Hypothesis four b: Exposure to posters depicting female to male violence will decrease benevolent sexism.

Assumption testing. The assumption of multicollinearity was met as each of the predictor variables correlated below the recommended .70 threshold (Pallant, 2013), and all tolerance values and variance inflation factors (VIF) were above .10 and below 10, respectively (Pallant, 2013). The assumption of independent errors was met as the Durbin Watson test revealed a value of 1.78, indicating a lack of autocorrelation. Examination of scatterplots, histograms, and P-P plots indicated that there were no violations of the assumptions of homoscedasticity, linearity, and normality.

Model. Multiple linear regression analyses were conducted to develop a model for examining the relationship between participants' post-exposure benevolent and hostile sexism scores from their pre-exposure benevolent and hostile sexism scores, gender, poster condition, and the interaction between gender and poster condition. Basic descriptive statistics and zero-order correlations are summarized in Table 1 and the regression coefficients, intercept, and confidence intervals are presented in Table 3.

Exposure to male to female violence on sexism. In exploring the effects of exposure to a poster depicting male to female violence (as shown in Table 3), no significant gender x poster interactions were found to predict either participants' endorsement of benevolent sexism or hostile sexism. Similarly, no significant effect of poster condition was found to predict participants' post-exposure benevolent sexism or hostile sexism scores. Results suggest that exposure to a campaign depicting male to female violence did not statistically significantly impact on participants' endorsement of benevolent sexism or hostile sexism, which does not support our predictions.

Exposure to female to male violence on sexism. First, we explored the relationship between participants' post-exposure benevolent sexism scores from their pre-exposure sexism scores, gender, poster condition, and the gender x poster interactions. Basic descriptive statistics and zero-order correlations are summarized in Table 1, and the regression coefficients, intercept, and confidence intervals are presented in Table 3. Using the enter method a significant regression equation was found, $F(7, 219) = 65.07, p < .001, R^2 = .68, R^2_{Adjusted} = .67$. As shown on the left side of Table 3, there was a significant gender difference in the association between exposure to a poster depicting female to male violence and endorsement of benevolent sexism, representing a large effect size. As shown in Figure 3, tests of simple effects revealed that there was a significant gender difference in residual change in endorsement of benevolent sexism for participants who viewed a poster depicting female aggression, $B = 0.34, SE = 0.16, t = 2.17, p = .031, 95\% CI [0.03, 0.65]$, with females decreasing the most in their endorsement of benevolent sexism relative to baseline. In contrast, there was no significant gender difference in residual change in endorsement of benevolent sexism for participants who viewed a non-violent control image: no people, $B = 0.06, SE = 0.12, t = -0.54, p = .590, 95\% CI [-0.30, 0.20]$. Furthermore, comparing differences at points on the simple slopes revealed that females who viewed a poster depicting female aggression decreased significantly more in their endorsement of benevolent sexism compared to females who viewed a non-violent control image: no people, $B = -0.25, SE = 0.11, t = -2.30, p = .022, 95\% CI [-0.47, -0.03]$, however, this difference was not significant for males, $B = 0.15, SE = 0.16, t = 0.96, p = .337, 95\% CI [-0.16, 0.46]$.

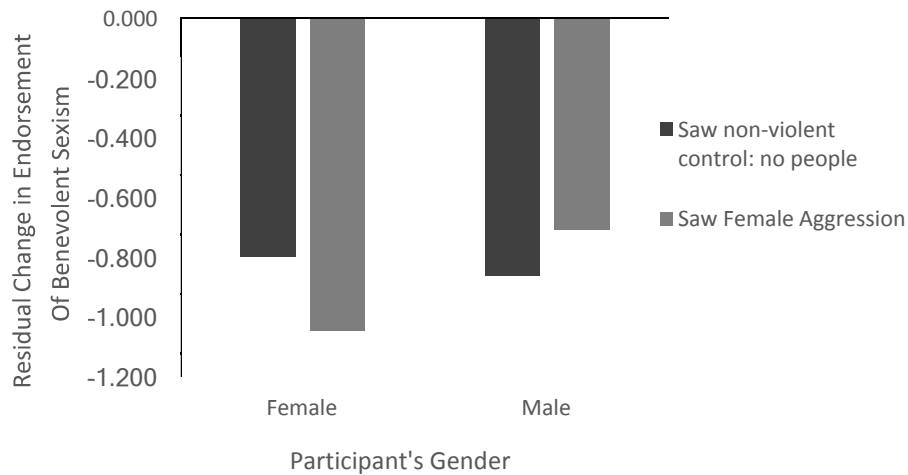


Figure 3. Male and female participants' residual change in endorsement of benevolent sexism towards women as a function of poster condition.

Following the same regression procedures described above, we examined the relationship between participants' post-exposure hostile sexism scores from their preexposure sexism scores, gender, poster condition, and the gender x poster interactions. The descriptive statistics and correlations are summarized in Table 1, and the regression coefficients, intercept, and confidence intervals are presented in Table 3. As shown on the right side of Table 3, there was no significant gender difference in the association between exposure to a poster depicting female to male aggression and endorsement of hostile sexism. Similarly, no significant effect of poster condition was found to predict participants' postexposure hostile sexism scores.

These results lend partial support to our predictions, as we found that exposure to a poster depicting female to male violence decreased participants' endorsement of benevolent sexism, with females decreasing the most relative to baseline. However, whilst we found a significant difference in benevolent sexism for females who were exposed to a poster depicting female aggression compared to those who viewed a non-violent control image: no people, this was not the case for male participants. The results of hypothesis four a and four b

suggest that where significant effects were obtained, campaign exposure effected benevolent sexist beliefs, not hostile sexist beliefs.

Table 3

Summary of Model of Predictors of Post-Benevolent Sexism (left) and Post-Hostile Sexism (right), with 95% Confidence Intervals Reported in Parentheses (N = 227)

Predictor Variables	Post-Benevolent Sexism					Post-Hostile Sexism				
	<i>B</i> [95% <i>CI</i>]	<i>SE B</i>	<i>t</i>	β	<i>p</i>	<i>B</i> [95% <i>CI</i>]	<i>SE B</i>	<i>t</i>	β	<i>p</i>
Constant	-0.83 [-0.94, -0.72]	0.06	-14.44	-	<.001	-0.91 [-1.03, -0.79]	0.06	-14.96	-	<.001
Gender	-0.06 [-0.30, 0.17]	0.12	-0.54	-.03	.590	-0.12 [-0.37, 0.13]	0.13	-0.97	-.05	.332
Pre-Benevolent Sexism	0.78 [0.69, 0.87]	0.05	17.04	.77	<.001	0.18 [0.09, 0.28]	0.05	3.79	.15	<.001
Pre-Hostile Sexism	0.08 [-0.00, 0.16]	0.04	1.88	.09	.061	0.84 [0.76, 0.93]	0.04	19.43	.80	<.001
DC Male aggression	0.06 [-0.14, 0.25]	0.10	0.56	.03	.577	0.02 [-0.19, 0.22]	0.11	0.17	.01	.868
DC Female aggression	-0.05 [-0.24, 0.14]	0.10	-0.50	-.02	.616	0.03 [-0.18, 0.23]	0.10	0.25	.01	.806
Gender x DC Male aggression	0.08 [-0.31, 0.47]	0.20	0.42	.02	.674	0.12 [-0.30, 0.53]	0.21	0.57	.02	.572
Gender x DC Female aggression	0.40 [0.02, 0.78]	0.19	2.09	.11	.038	0.20 [-0.21, 0.60]	0.21	0.97	.04	.335

Note. Gender was coded as -.5 = Female, .5 = Male. *B* = unstandardized regression coefficient; *SE B* = Standard error of the coefficient; β = standardized coefficient; *CI* = confidence interval; DC = dummy code

Study Two

Study two was a replication of study one using an altered experimental design. Study two employed a between-subjects experimental design assessing participants' approval of IPV and sexism after exposure to campaigns. Hence, study two examined hypotheses three and four only. The main findings for each hypothesis will be presented in turn.

Hypothesis three a: Exposure to posters depicting male to female violence will decrease approval of male to female violence for men (and not women, because they are at the floor of this measure).

Hypothesis three b: Exposure to posters depicting female to male violence will decrease approval of female to male violence for men and women.

Assumption testing. The assumption of multicollinearity was met as each of the predictor variables correlated below the recommended .70 threshold (Pallant, 2013), and all tolerance values and variance inflation factors (VIF) were above .10 and below 10, respectively (Pallant, 2013). The assumption of independent errors was met as the Durbin Watson test revealed a value of 2.06, indicating a lack of autocorrelation. Examination of scatterplots, histograms, and P-P plots indicated possible violations of the assumptions of homoscedasticity, linearity, and normality. To correct for these violations, a robust regression using bootstrapping to produce 95% BCa confidence intervals was performed.

Model. Multiple linear regression analyses were conducted to develop a model for examining the relationship between participants' post-exposure approval of male and female aggression from their gender, poster condition, and the interaction between gender and poster condition. Basic descriptive statistics and zero-order correlations are summarized in Table 4. Exploratory analyses were conducted to test whether there were differences in approval of aggression at different levels of victim behaviour (no provocation, infidelity, and physical violence).

Exposure to male to female violence on approval. In exploring the effects of exposure to a poster depicting male to female violence, no significant gender x poster interactions were found to predict either approval of male aggression (total, no provocation, infidelity, or physical violence; $B_s = -0.02$ to 0.10 ; $t_s = -0.10$ to 0.51 ; $p_s > .629$) or approval of female aggression (total, no provocation, infidelity, or physical violence; $B_s = -0.47$ to 0.05 ; $t_s = 0.47$ to 0.05 ; $p_s > .090$). Similarly, no significant effect of poster condition was found to predict either approval of male aggression (total, no provocation, infidelity, or physical violence; $B_s = -0.18$ to -0.12 ; $t_s = -1.80$ to -0.92 ; $p_s > .060$) or approval of female aggression (total, no provocation, infidelity, or physical violence; $B_s = -0.26$ to -0.11 ; $t_s = -2.10$ to -0.84 ; $p_s > .070$). These results are consistent with study one and suggest that exposure to a poster depicting male to female violence did not have a statistically significant impact on participants' approval of male aggression or female aggression, which does not support our prediction.

Exposure to female to male violence on approval. In exploring the effects of exposure to a poster depicting female to male violence, no significant gender x poster interactions were found to predict either approval of male aggression (total, no provocation, infidelity, or physical violence; $B_s = -0.33$ to 0.21 ; $t_s = -1.36$ to 1.04 ; $p_s > .190$) or approval of female aggression (total, no provocation, infidelity, or physical violence; $B_s = -0.30$ to -0.05 ; $t_s = 1.22$ to -0.16 ; $p_s > .276$). Similarly, no significant effect of poster condition was found to predict either approval of male aggression (total, no provocation, infidelity, or physical violence; $B_s = -.14$ to -0.08 ; $t_s = -1.47$ to -0.97 ; $p_s > .137$) or approval of female aggression in the context of no provocation or physical provocation from the victim ($B_s = -0.24$ to -0.06 ; $t_s = -1.50$ to -0.80 ; $p_s > .152$). These results are consistent with those obtained in study one. However, results revealed a significant effect of poster condition in predicting total approval of female aggression ($B = -0.20$, $t = -2.19$, $p = .038$) and approval in the context of infidelity

($B = -0.30, t = -2.47, p = .033$). As expected, this indicates that participants who viewed a poster depicting female aggression approved of female aggression (total: $M = 0.61, SD = 0.56$; infidelity: $M = 0.61, SD = 0.74$) significantly less than participants who viewed a nonviolent control image: no people (total: $M = 0.77, SD = 0.65$; infidelity: $M = 0.85, SD = 0.87$). Whilst these findings were not observed in study one, they do support our predictions.

Hypothesis four a: Exposure to posters depicting male to female violence will increase benevolent sexism.

Hypothesis four b: Exposure to posters depicting female to male violence will decrease benevolent sexism.

Assumption testing. The assumption of multicollinearity was met as each of the predictor variables correlated below the recommended .70 threshold (Pallant, 2013), and all tolerance values and variance inflation factors (VIF) were above .10 and below 10, respectively (Pallant, 2013). The assumption of independent errors was met as the Durbin Watson test revealed a value of 2.01, indicating a lack of autocorrelation. Examination of scatterplots, histograms, and P-P plots indicated that there were no violations of the assumptions of homoscedasticity, linearity, and normality.

Model. Multiple linear regression analyses were conducted to develop a model for examining the relationship between participants' post-exposure benevolent and hostile sexism scores from their gender, poster condition, and the interaction between gender and poster condition. Basic descriptive statistics and zero-order correlations are summarized in Table 4.

Exposure to male to female violence on sexism. In exploring the effects of exposure to a poster depicting male to female violence, no significant gender x poster interactions were found to predict either participants' endorsement of benevolent sexism ($B = -0.37; t = -1.27; p = .204$) or hostile sexism ($B = -0.34; t = -0.99; p = .323$). Similarly, no significant effect of

poster condition was found to predict either participants' endorsement of benevolent sexism ($B = -0.13$; $t = -0.87$; $p = .387$) or hostile sexism ($B = -0.17$; $t = -0.98$; $p = .328$). These results are consistent with study one and suggest that exposure to a campaign depicting male to female violence did not significantly impact on participants' endorsement of benevolent sexism or hostile sexism, which does not support our predictions.

Exposure to female to male violence on sexism. In exploring the effects of exposure to a poster depicting female to male violence, no significant gender x poster interactions were found to predict either participants' endorsement of benevolent sexism ($B = -0.03$; $t = -0.09$; $p = .930$) or hostile sexism ($B = -0.16$; $t = -0.48$; $p = .631$). Similarly, no significant effect of poster condition was found to predict either participants' endorsement of benevolent sexism ($B = -0.08$; $t = -0.59$; $p = .555$) or hostile sexism ($B = -0.25$; $t = -1.50$; $p = .134$). Taken together, these results suggest that exposure to a campaign depicting male to female violence did not significantly impact on participants' endorsement of benevolent sexism or hostile sexism, which does not support our predictions. For the most part, these results are consistent with study one, however, in study one we did find a significant gender x poster interaction indicating that exposure to a poster depicting female aggression led to a significant change in participants' endorsement of benevolent sexism, with females decreasing the most relative to baseline.

Table 4

Study Two Descriptive Statistics and Correlations for Primary Measures

Variables	<i>M (SD)</i>	Zero-order correlations						
		1	2	3	4	5	6	7
1. Total Approval of Male Aggression	0.38 (0.49)	-						
2. Total Approval of Female Aggression	0.68 (0.60)	.68**	-					
3. Approval of Male Aggression: Infidelity	0.36 (0.64)	.84**	.54**	-				
4. Approval of Female Aggression: Infidelity	0.70 (0.80)	.53**	.82**	.52**	-			
5. Gender	-	.12*	.21**	.13*	.20**	-		
6. Hostile Sexism	-0.98 (1.09)	.22**	.23**	.25**	.20**	.22**	-	
7. Benevolent Sexism	-0.67 (0.92)	.09	.28**	.12*	.26**	.18**	.59**	-

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

Discussion

This study aimed to investigate whether manipulating the traditional gender roles of men and women experiencing intimate partner violence (IPV) in simulated media campaigns impacts on participants' endorsement of sexism, and beliefs about the acceptability of IPV using a New Zealand university sample. More specifically, four hypotheses were tested across two studies that differed in experimental design. Each hypothesis will be summarised in turn alongside an interpretation of the current findings in the context of the wider IPV literature. Finally, implications for policy and practice, limitations, and future research will be discussed.

Summary of Findings

Hypothesis one a and one b. Hypothesis one sought to examine the collective normative belief of IPV approval held by male and female participants by measuring their approval ratings of male and female perpetrated IPV. This hypothesis was examined in study one only and provides a baseline measure for participants' approval of IPV prior to campaign exposure. Concordant with previous literature (e.g., Felson & Feld, 2009; Simon et al., 2001), the current study found that the gender of the aggressor had a significant impact on participants' approval of IPV, with a large effect obtained. Analysis of variance revealed that, as predicted, participants approved of female to male violence significantly more than male to female violence. This finding is consistent with Simon et al. (2001), who examined attitudinal acceptance of IPV in a representative American sample of 5,238 adults and demonstrated that participants were significantly more accepting of women hitting their male partners, compared to men hitting their female partners. These findings add to the robust wealth of literature challenging the gendered conceptualisation of IPV, which asserts that patriarchal beliefs are the direct cause of male to female violence (Dobash & Dobash, 1979). Indeed, the current findings showed that the overall pattern of approval of IPV was not patriarchal; rather,

it was chivalrous. As highlighted by Huesmann and Guerra (1997), individual normative beliefs are likely to be congruent with the prevailing societal norm concerning IPV.

Therefore, the chivalrous pattern observed in the current study *may* reflect a chivalrous norm in the wider community. However, such a conclusion can only be made tentatively, as Huesmann and Guerra (1997) demonstrate that individual norms can differ from societal norms. Furthermore, the authors illustrate that exposure to IPV in one's immediate context may be more influential in shaping individual normative beliefs than prevailing societal norms. Despite this, studies using representative American samples have also found a chivalrous pattern (e.g., Felson & Feld, 2009). Indeed, replication of the current study using a representative New Zealand sample is needed before any sound conclusions pertaining to wider societal normative beliefs about IPV can be considered.

Analysis of variance also revealed that the gender of the participant had a significant impact on approval of IPV, with a small effect obtained. Results indicated that male participants approved of IPV, regardless of aggressor's gender, significantly more than female participants. This is consistent with an extensive body of research indicating that men approve of violence in relationships, and violence in general, more than women (e.g., Cauffman, Feldman, Jensen, & Arnett, 2000; Straus, Gelles, & Steinmetz, 2006). Therefore, this suggests that it is important to consider both the gender of the participant and the gender of the aggressor when examining gender differences in approval of IPV. Notably, the presence of a significant two-way interaction between the gender of the participant and the gender of the aggressor further reinforces this notion. In exploring this interaction further, it was found that both male and female participants approved of female to male violence significantly more than male to female violence, however, this approval was most pronounced for male participants. In accordance with previous literature (e.g., Ameral, Palm Reed, & Hines, 2017; Tsui, Cheung, & Leung, 2010), this finding suggests that men may be less likely

to seek help and more likely to stay in abusive relationships, as the use of female violence is not perceived as a serious societal problem. Indeed, the current conceptualisation of IPV as a “women’s issue” has resulted in limited services available for male victims (Straus & Gelles, 1986). In line with this, research exploring the help-seeking experiences of male victims of IPV reveal that existing partner violence services are not always able to support them (Hines & Douglas, 2011) and many men are often turned away (Douglas & Hines, 2011).

From a gendered perspective, socialisation processes should lead males to endorse high levels of approval of male to female violence, however, such a monolithic conceptualisation cannot account for the current finding that male participants endorsed higher approval of female to male violence. Instead, this finding suggests that chivalrous norms, not patriarchal norms, were most prominent among male and female students, and this was especially true for males. This suggests that a gender inclusive perspective that acknowledges men’s *and* women’s beliefs about IPV may provide a more useful framework from which to understand IPV and inform prevention campaigns, rather than a single factor gendered theory.

Additionally, focusing on male to female violence, it was apparent that no gender differences existed, with both male and female participants reporting low levels of approval. These findings are partially supported by Spencer, Morgan, Bridges, Washburn-Busk, and Stith (2017) who explored gender differences in approval rates of IPV using an American university sample and found that male students held greater approval of female to male IPV compared to female students. However, unlike this study, the authors also found that male students held greater approval of male to female IPV compared to female students. Differences in findings may be accounted for by the variations in methodological approach between the two studies. For example, Spencer et al. (2017) used an adapted version of the

“Wife Beating is Justified” subscale from the Inventory of Beliefs About Wife Beating Scale (Saunders, Lynch, Grayson, & Linz, 1987). The adapted subscale asks about approval of physical violence within marital relationships. Examples of questions include “sometimes it is okay for a man to beat his wife” or “a man who constantly insults his wife deserves to be hit”. Contrarily, the current study used an adapted version of the Beliefs about Relationship Aggression Scale (BaRAS-SV). This measure is more appropriate for use with dating and student samples as questions are introduced in a neutral relationship context. Therefore, studies employing the BaRAS-SV may have greater ecological validity than studies using the “Wife Beating is Justified” subscale. However, further research is needed to determine the validity of this claim.

Contrary to existing IPV prevention campaigns that arguably aim to reduce societal acceptance of male to female violence, the current study suggests that targeting public approval of female to male violence may result in greater societal reductions of IPV. Interestingly, the finding of males’ higher approval of female aggression may, somewhat paradoxically, aid in explaining why limited ameliorative attempts have been put into practice to address the issue of female to male IPV in society (Straus & Gelles, 1986). This is because female violence in relationships is viewed as trivial and inconsequential (Felson, 2010; Fiebert & Gonzalez, 1997), and therefore is not considered abuse. As a result, services and prevention efforts have been implemented to address the issue of male to female violence, as this is considered the most problematic form of IPV (Dobash & Dobash, 2004). Nevertheless, it seems apparent that there is a need to target approval of female aggression through prevention campaigns instead of consistently portraying IPV as an asymmetrical problem that is motivated by patriarchal beliefs and approval of male to female violence. By educating individuals that any violence in a relationship is unacceptable, services may be better equipped to provide appropriate support for women *and* men experiencing IPV. Indeed,

research has demonstrated that when men have cumulative positive help-seeking experiences, this can decrease risk factors associated with IPV perpetration and victimisation (e.g., alcohol abuse; Douglas & Hines, 2011). Comparatively, when men have cumulative negative help seeking experiences, this is associated with an increase in mental health issues such as posttraumatic stress disorder (Douglas & Hines, 2011).

Hypothesis two. Hypothesis two sought to examine if there was a relationship between male and female participants' endorsement of sexism and approval of male to female and female to male IPV. This hypothesis was examined in study one only and provides a baseline measure for participants' endorsement of hostile and benevolent sexism towards women. As such, each relationship was explored prior to campaign exposure. Preliminary regression analyses revealed that, as expected, male participants endorsed significantly more hostile sexism towards women compared to female participants, however, there was no significant gender difference in endorsement of benevolent sexism. This is in accordance with previous literature. For example, Glick et al. (2002) examined ambivalent sexism and attitudes towards wife abuse in a Turkish and Brazilian sample and found that women, compared to men, tended to reject hostile sexism, however, women endorsed benevolent sexism as much as, or more, than men.

Sexism and approval of male aggression. Regression analyses found that neither hostile sexism or benevolent sexism was significantly related to male participants' approval of their own gender's aggression. From a gendered understanding of IPV, patriarchal beliefs and hostile sexism drive men's approval of male violence to women in relationships and thus, campaigns attempt to change approval of male aggression. Notably, the lack of empirical evidence supporting the predictive relationship between hostility towards women and approval of male to female violence in the current study adds to the plethora of literature refuting the plausibility of the gendered thesis. Similar conclusions have been drawn by

gender inclusive researchers investigating the predictive relationship between wife assault and endorsement of a patriarchal ideology. For example, Sugarman and Frankel's (1996) meta-analytic review of 29 studies found limited support for the role of traditional sex-role ideology in the aetiology of male perpetrated IPV. However, such findings appear contrary to research that has demonstrated a significant link between hostile sexism and approval of IPV. For example, Sakalli (2001) investigated the effects of patriarchy and ambivalent sexism on beliefs about wife beating and found that male participants who endorsed a patriarchal ideology, and those who were high on hostile sexism, perceived wife beating as more acceptable and were more likely to blame the female victim for eliciting the violence. The disparities between the results of Sakalli's (2001) study and the present study might be due to cultural differences of the samples studied. For example, Sakalli (2001) used a young Turkish college sample, whereas participants of the present study consisted of young New Zealand university students. It has been established that Turkish society is highly patriarchal, with clearly distinguished and defined gender role differences (Sakalli, 2001). Comparatively, research has demonstrated that the impact of patriarchal values is diminished in Western nations, owing to egalitarian values disapproving of the use of male violence towards women (Archer, 2000; 2006). In other words, although research shows that ambivalent sexism is comprised of hostile and benevolent sexism, which are highly correlated, only the socially accepted version of sexism will be expressed (Glick & Fiske, 1996). In Western society, this is benevolent sexism. Therefore, the gendered theory may be useful for informing policy and prevention efforts in non-Western countries where patriarchy may be the norm, however, it arguably has less relevance in Western nations (such as New Zealand) that appear to exhibit a chivalrous norm endorsing the protection of women, as supported by the results of hypothesis one.

Additionally, regression analyses revealed that the more that female participants (but not male participants) endorsed benevolent sexism, the less they approved of male aggression in the context of no provocation from the female victim. This was a moderate effect. In line with previous literature (e.g., Allen et al., 2009), this finding suggests that endorsement of benevolent sexism by female participants in the sample may act as a protective factor for women against male perpetrated IPV in terms of increasing women's help-seeking if harmed by a partner, or willingness to help other women. Interestingly, the current study found no empirical support for the protective role of benevolent sexism against male aggression for male participants in the sample. This finding can be explained in part by the ambiguity of the situation in which the context of the violence occurred. For example, Valor-Segura et al. (2011) found that when no specific cause of violence was mentioned, there was a general propensity for participants to blame the female victim and exonerate the male perpetrator. Thus, benevolent sexist attitudes endorsed by male participants in the present study may have become less relevant if they somehow justified the use of aggression against a female victim in the context of no provocation.

Interestingly, results of the current study further revealed that where the participant perceived credible provocation (i.e., physical aggression or sexual infidelity) from the female victim, the negative relationship between benevolent sexism and approval of male aggression that was found for female participants disappeared. This suggests that female participants in the current study were more likely to approve of male aggression used against their own gender when the woman seemingly breached the boundaries of their benevolent stereotype. This is also in accordance with previous literature (e.g., Abrams, Viki, Masser, & Bohner, 2003; Glick et al., 2002). These findings suggest that men and women may be less likely to assist women who experience IPV who have broken the benevolent stereotype by initiating physical violence or being unfaithful. However, seeing as research has demonstrated that

around half of IPV cases are reciprocal (e.g., Straus et al., 2006), these findings indicate that there is a need to tailor messages promoted in prevention campaigns to specific types of IPV contexts, and to advertise that violence under any circumstance is unacceptable. Indeed, research has consistently demonstrated the importance of provocation in eliciting interpersonal violence (e.g., Bettencourt & Miller, 1996; Felson et al., 2015), and thus, there is a need for campaigns to address attitudes and beliefs that drive both approval of one's own use of aggression *and* approval of their partner's aggression under various situations.

Sexism and approval of female aggression. Regression analyses found that benevolent sexism was a significant predictor of participants' total approval of female aggression and approval in the context of infidelity from the male victim. Specifically, findings demonstrated that the more male and female participants endorsed benevolent sexism, the more they approved of female aggression in these contexts. In line with these findings, research has demonstrated that benevolent gendered stereotypes (i.e., women are weak and fragile; men are strong and powerful) inform participants' judgements about the acceptability of IPV perpetrated by a man and a woman (Seelau & Seelau, 2005). As a result, the use of female aggression in relationships is perceived as trivial and not injurious, which may aid in explaining why a positive relationship between benevolent sexism and approval of female aggression was observed in the present study. Taken together, these findings add to a growing body of literature suggesting that benevolent sexism may serve to increase acceptance of female violence towards men (e.g., Felson, 2010; Felson & Feld, 2009). Therefore, this indicates that there is a need for prevention campaigns to target these benevolent sexist attitudes that perpetuate the approval of female to male IPV, to reduce male victimisation and reciprocal aggression. However, the present study also observed a negative relationship between benevolent sexism and approval of male aggression for female participants. Due to this, decreasing benevolent sexism through prevention campaigns *may*

inadvertently increase women's approval of male to female violence. Consequently, care should be taken when advertising that women are aggressive to men in relationships to avoid any unintentional consequences, such as a potential increase in the likelihood of women being aggressed against in reciprocal relationships.

Additionally, overall the current study found no relationship between benevolent sexism and approval of female aggression in the contexts of no provocation and physical violence. These results suggest that (a) male and female participants were generally disapproving of female aggression when the female perpetrator was unprovoked (e.g., Felson et al., 2015), and (b) where the male victim had initiated physical violence, male and female participants were less approving of female aggression compared to when the male had been unfaithful. Research has established that men and women perceive certain behaviours as more provocative than others (e.g., Bettencourt & Miller, 1996). Therefore, it may be that participants in the present study viewed sexual infidelity as more aggravating than other types of provocation (i.e., physical aggression), and thus have greater justification for the use of female aggression. In line with this, research has established that sexual infidelity by a partner is a greater risk factor for female aggression (Paul, Foss, & Galloway, 1993), whereas physical provocation is a greater risk factor for male aggression (Bettencourt & Miller, 1996; Harris, 1993). Finally, the present study found no relationship between hostile sexism and approval of female aggression. This suggests that male and female participants endorsing hostile sexism were generally disapproving of female aggression used across various provocation levels.

Taken together, these results indicate that approval of both male to female and female to male IPV is driven primarily by benevolent sexism, and not hostile sexism – as the gendered theory suggests. Instead, the present study found that Felson's (2000) chivalrous theory was useful in predicting participants' approval of IPV. However, it is important to note

that whilst there was a relationship between benevolent sexism and approval of IPV, sexism accounted for around 3% of the total variance for approval of male and female aggression. This is in line with research highlighting that while sexism may be a risk factor for IPV, it is not the sole cause (Dutton, 2006; Stith et al., 2004). Arguably, this further reinforces the need for campaigns and other prevention efforts to be informed by multifactorial frameworks such as Dutton's (2006) nested ecological model, rather than single factor gendered theories. Consequently, this raises the question of why campaigns are derived from the gendered perspective if it is not supported by methodologically sound empirical evidence: indeed, there is a paucity of research demonstrating the effectiveness of such gendered campaigns in changing attitudes and reducing IPV (Campbell & Manganello, 2006).

Hypothesis three a and three b. Hypothesis three sought to explore the short-term effects of gendered primary prevention campaigns on male and female participants' approval of male to female and female to male IPV across two studies.

Exposure to male to female violence on approval. Across both studies, regression analyses revealed that exposure to a poster depicting male aggression did not significantly impact on participants' approval of IPV when perpetrated by a man or a woman. From a gendered perspective, campaigns need to depict male to female aggression to reduce approval of male to female violence in society. Of particular importance, male and female participants in the present study reported very low levels of approval of male to female violence at baseline, and thus, the presence of a floor effect may account for the non-significant changes in approval following exposure to campaigns depicting male aggression. However, if this floor effect is held at a wider societal level, as is highlighted by Huesmann and Guerra (1997), then campaigns derived from the gendered theory are likely to be ineffective in reducing societal approval and prevalence rates of IPV. Indeed, similar conclusions have been drawn by research conducted at the other levels of the public health framework (e.g., Babcock

et al., 2004). Contrarily, some research exists that demonstrates the effectiveness of such campaigns in changing attitudes about IPV. For example, the second phase of the 'It's not OK' campaign implemented in New Zealand utilised a gendered approach to family violence by only depicting men as perpetrators and sharing their stories of abuse (Point Research Ltd., 2010). An evaluation of the campaign found that around 66% of people aware of the campaign felt it helped them to understand what behaviours were acceptable in relationships and facilitated help-seeking behaviours among violent men (Point Research Ltd., 2010). However, a different methodological approach was utilised to explore the efficacy of the 'It's not OK' campaign compared to the current study which could aid in explaining the discrepancies in findings. For example, the evaluation of the 'It's not OK' campaign utilised a qualitative study methodology. Semi-structured interviews were conducted in person or by phone. A significant number of people interviewed had been involved in either the planning, or implementation of the campaign, and thus, may have been primed to respond in a positive manner. In addition, it did not test the magnitude of any effect on the theoretical constructs that would be expected to change via exposure to the posters. In contrast, the current study measured the impact of gendered campaigns on constructs that should theoretically change after exposure (i.e., beliefs and sexism), and analysed the magnitude of change using statistical analysis and effect sizes. Furthermore, whilst aspects of the campaign utilised a gendered approach, the campaign was developed in accordance with a multi-layered integrated approach to prevention and incorporated community-based supports (Point Research Ltd., 2010). Thus, gendered prevention efforts may be useful when used in combination with other interventions that target different systems within an individual's life. Indeed, research shows that the majority of campaigns reporting significant effect sizes are used in combination with other preventative interventions (Elder et al., 2004). Therefore, given that entrenched lifestyle attitudes and behaviours, such as IPV, are unlikely to be

changed by minimalistic efforts such as mass media campaigns alone, it is important that prevention approaches are multifaceted (Elder et al., 2004).

Exposure to female to male violence on approval. In study one, regression analyses revealed that exposure to a poster depicting female aggression did not significantly impact on participants' approval of IPV when perpetrated by a man or a woman. The results of study two were partially consistent with this, however, regression analyses revealed a significant effect of poster condition in predicting total approval of female aggression and approval in the context of infidelity from the male victim. As hypothesised, this indicates that participants who viewed a poster depicting female aggression approved of female aggression significantly less than participants who viewed a non-violent control image: no people. Therefore, this suggests that decreases in societal acceptance of female to male violence are plausible, and gender inclusive prevention campaigns can be utilised as a mechanism for achieving this change. From a gendered perspective, female violence is best understood in the context of self-defence, retaliation, or pre-emption from male aggression (Dixon & Graham-Kevan, 2011), and thus limited ameliorative attempts have been put into practice to address the issue of female perpetrated violence. This is further highlighted by Straus and Gelles (1986) who noted that the little change in prevalence rates of IPV perpetrated by women across a ten-year period was consistent with the scarcity of ameliorative programmes. Together with the current findings, this suggests that there is a need to address the issue of female to male violence in society, and that prevention efforts should be informed by multifactorial frameworks to reduce IPV and reciprocal aggression in relationships.

Hypothesis four a and four b. Hypothesis four sought to explore the short-term effects of gendered primary prevention campaigns on male and female participants' endorsement of hostile and benevolent sexism across two studies.

Exposure to male to female violence on sexism. Across both studies, regression analyses revealed that exposure to a poster depicting male aggression did not significantly impact on participants' endorsement of hostile or benevolent sexism. From a gendered perspective, hostile sexism is theorised to drive approval of male to female violence in society, and thus, campaigns need to depict male aggression in order to reduce sexism. In accordance with previous literature (e.g., Sugarman & Frankel, 1996), no empirical support for the predictive relationship between hostile sexism and approval of male aggression was observed. Thus, it is unsurprising that campaigns depicting male aggression did not significantly change participants' endorsement of hostile sexism in the current study. Additionally, the results of hypothesis two indicated that benevolent sexism did not provide a protective effect for male participants' approval of male aggression. Therefore, it makes sense that depictions of male aggression through prevention campaigns did not facilitate these benevolent sexist attitudes, promoting the protection of women, among men. Together with the high endorsement of benevolent sexism by female participants at baseline, this aids in explaining why non-significant changes in sexism following exposure to campaigns depicting male aggression were observed in the current study. This further reinforces that a multifactorial explanation of IPV, which addresses risk factors operating within different systems (e.g., Dutton, 2006), is needed to inform successful interventions.

Exposure to female to male violence on sexism. In study one, regression analyses revealed that exposure to a poster depicting female aggression decreased participants' endorsement of benevolent sexism, with females decreasing the most relative to baseline. This was a moderate effect. Additionally, findings demonstrated that female participants who viewed a poster depicting female aggression decreased significantly more in their endorsement of benevolent sexism compared to female participants who viewed a non-violent control image: no people. However, this difference was not significant for males. In

accordance with previous literature (e.g., Keller et al., 2010), this finding illustrates that there are differences in how men and women internalise messages promoted in prevention campaigns. Although, results indicated a significant reduction in benevolent sexism for female participants, further research is needed to determine if this is a positive outcome. For example, future research could explore how changes in benevolent sexism subsequently impact on female participants' own use of violence over time.

In study two, regression analyses revealed that exposure to a poster depicting female aggression did not significantly impact on male and female participants' endorsement of benevolent sexism. Although no significant changes in sexism were observed, the results of hypothesis three b revealed a significant effect of poster condition on approval of female aggression. In line with previous literature (e.g., Dutton, 2006; Stith et al., 2004), these findings further highlight that sexism is one risk factor that perpetuates approval of violence and the subsequent perpetration of IPV.

As highlighted by Glick and Fiske (1996), hostile sexism is most relevant when sexes are not conforming to traditional gender roles – which may be the case when women are portrayed as perpetrators, and men as the victims, of IPV in heterosexual relationships. Despite this, the current study found no significant change in male and female participants' endorsement of hostile sexism following exposure to a campaign depicting female aggression across the two studies. This finding can be explained in part by the trivialisation of female violence in relationships. For example, statistics from the British Crime Survey revealed that 29% of all respondents that had experienced some form of IPV victimisation in the previous 12 months thought this was 'just something that happens' in relationships (36% of males and 23% of females; Povey, Coleman, Kaiza, Hoare, & Jansson, 2008). Hence, perceptions of "traditional" gender roles may have evolved, which could aid in explaining why there was a

non-significant change in participants' endorsement of hostile sexism following exposure to a poster depicting female aggression.

Implications for Policy and Practice

The present study contributes to the extensive body of literature challenging the gendered thesis and highlights the tenuous nature of research demonstrating the role of patriarchal beliefs in the aetiology of male perpetrated IPV. Specifically, no empirical support was found in the current study for a predictive relationship between hostile sexism and approval of male to female violence. Similarly, primary prevention campaigns depicting male aggression were observed to have limited impact on participants' approval of IPV and endorsement of sexism. Despite such findings, the gendered theory remains the most instrumental approach to constructing intervention strategies across the public health framework. Indeed, the most prominent clinical interventions for perpetrators of IPV utilise the Duluth model, which promotes the reprogramming of men's patriarchal belief systems (Eckhardt et al., 2006). In fact, the states of Iowa and Florida in the United States mandate that treatment programmes must adhere to the principles of the Duluth model in order to be state certified (Healey, Smith, & O'Sullivan, 1998). Such policies appear to prevail despite the paucity of empirical support for the gendered theory, and the limited effectiveness of these interventions in reducing recidivism rates. Indeed, numerous outcome evaluation studies have reported less than small effect sizes for interventions based on the gendered approach, indicating a lack of effectiveness (e.g., Davis & Taylor, 1999; Feder & Forde, 1999). Research has also demonstrated that alternative interventions, such as cognitive-behavioural therapy (CBT) which incorporates multiple elements like skills training, anger management techniques, and promotes awareness of alternatives to violence, have limited effectiveness in reducing recidivism. For example, a meta-analysis of 22 studies comparing the efficacy of treatment programmes based on the Duluth model, to those utilising a CBT

approach, found that both interventions had minimal impact on recidivism rates, and that neither intervention strategy outperformed the other (Babcock et al., 2004). The authors also noted that modern intervention strategies tend to mix different theoretical perspectives, combining both the gendered approach and CBT specific interventions. Considering this, it is unsurprising that equivalent effect sizes were obtained across the two different modalities of treatment (Babcock et al., 2004). Indeed, the fact that the primary focus of CBT based interventions is to address the use of violence, rather than the underlying beliefs could account for why these interventions have limited success (Flood, 2011). Due to the fact that most interventions primarily address men's attitudes and violence towards women, treatment programmes currently disregard the symmetrical nature of IPV and the relational aspects that should also be targeted. It appears that whilst there has been a theoretical shift from single factor gendered explanations of IPV to a multifactorial understanding, similar advancements in policy and practice have not yet been achieved.

The current study found support for the implementation of gender inclusive prevention approaches. Indeed, empirical research has identified that multiple risk factors are involved in the aetiology of male *and* female perpetrated IPV (e.g., Stith et al., 2004). This is a far cry from understanding IPV as an issue purely motivated by patriarchal beliefs. Therefore, this highlights the need for treatment to target relevant criminogenic needs in a gender inclusive manner, in order to reduce IPV at a societal level (Dixon & Graham-Kevan, 2011). Indeed, the current study suggests that it is important for interventions to target both men's *and* women's attitudes towards violence and endorsement of sexism. Additionally, the present study found that when credible provocation was perceived (i.e., physical aggression or sexual infidelity), participants were more approving of IPV. Therefore, this highlights that there is a need for prevention efforts to address the reciprocal nature of IPV and to tailor prevention messages to specific types of IPV contexts. Indeed, research has demonstrated that reciprocal

IPV is associated with increased injury for both male and female victims compared to unidirectional IPV (Whitaker, Haileyesus, Swahn, & Saltzman, 2007). In these cases, treatment should involve both members of the relationship, and should aim to foster their understanding of the risk factors that perpetuate violence and implement alternative strategies to help individuals manage high-risk situations (Whitaker et al., 2007).

The present study found that gendered primary prevention campaigns had limited impact on participants' endorsement of sexism and approval of IPV, thus suggesting that prevention efforts need to be informed by multifactorial frameworks, rather than single factor gendered theories. Indeed, there is a growing consensus that the most effective IPV interventions are those that employ multiple strategies aimed at generating change across multiple systems operating in an individual's life – individual, relationship, community, and societal (Dutton, 2006; Flood, 2011). Existing literature has demonstrated the effectiveness of gender inclusive strategies adopting such a multifaceted approach to violence prevention. For example, Foshee et al. (2004) examined the efficacy of the Safe Dates Programme in an adolescent American sample and found significant differences between treatment and control groups in perpetration and victimisation rates of dating violence at a 4-year follow-up. The authors also illustrated that adolescents involved in the programme self-reported 56-92% less dating violence perpetration and victimization at follow-up. Despite the established effectiveness of such gender inclusive early prevention efforts in achieving prolonged behavioural change, very few existing interventions have adopted such a comprehensive approach (Flood, 2011). Similar developmentally appropriate gender inclusive initiatives have been implemented in universities in the United States. For example, Clark University has established the Clark Anti-Violence Education Programme (CAVE) which provides mandatory educational programmes designed to challenge students' attitudes and beliefs that facilitate violence to all incoming students (Clark University, 2018). One such programme is

‘Bringing in the Bystander’, which views men and women as potential helpers and bystanders of incidents of violence, rather than understanding men as perpetrators and women as victims (Hines & Palm Reed, 2017). Indeed, research has demonstrated that employing such a neutral approach to prevention elicits less defensiveness and facilitates openness to change among recipients (Katz, 1994). A growing body of literature exists that highlights the effectiveness of such programmes in changing attitudes, knowledge, and behaviours regarding IPV. For example, Hines and Palm Reed (2017) evaluated the efficacy of online and in-person bystander interventions and found that both programmes led to significant positive changes in knowledge, critical thinking, and bystander intentions among participants. Currently, no such programmes have been implemented in New Zealand universities despite the established disproportionately high rates of IPV experienced among dating and university samples (Ministry of Justice, 2015). Together with the current findings that found some level of support for the use of gender inclusive campaigns in significantly changing participants’ approval of IPV and sexism, implementing similar programmes in New Zealand universities could aid in reducing societal prevalence rates of IPV.

The current study found that participants held greater approval of female perpetrated IPV compared to male perpetrated IPV, and that this approval was most pronounced for male participants. This finding suggests that prevention efforts should primarily aim to reduce men’s greater approval of female aggression in order to achieve the greatest reductions in reciprocal violence. Indeed, the trivialisation of female aggression aids in explaining why female violence in relationships is not viewed as a societal problem (Straus & Gelles, 1986). However, this finding carries several important implications. First, heterosexual men in violent relationships may be less likely to report abuse or seek help, as female aggression is perceived as trivial and inconsequential. Second, when men do seek help from police and practitioners, their experiences of IPV are likely to be minimized. Indeed, research suggests

that male victims of IPV experience gender-bias when disclosing abuse, such as being blamed for the abuse and are subsequently referred to batterer's treatment programmes (e.g., Douglas & Hines, 2011; Hines, Brown, & Dunning, 2007; Tilbrook, Allan, & Dear, 2010), and that clinicians rate male perpetrators of IPV as more pathological and dangerous, compared to female perpetrators (Follingstad, DeHart, & Green, 2004). Thus, it appears that perceptions of male and female perpetrated IPV held among participants in the current sample may be shared by professionals. Therefore, in line with the current findings, there is a need for prevention efforts to educate society about the prevalence and consequences of male *and* female perpetrated IPV. Similarly, attempts should be made to reduce the stigma associated with experiencing abuse, especially for male victims, so that their needs can be addressed during treatment.

From a public health perspective, effective policies for IPV prevention need to be grounded in science and informed by empirically supported theoretical frameworks (Dixon & Graham-Kevan, 2011). Despite a wealth of evidence to the contrary, IPV is predominately conceptualised as an issue of men's violence towards women (Dobash & Dobash, 1979), and as such, has permeated into the development of social policy, both nationally and internationally. For example, policies guiding family violence assessment and intervention in New Zealand highlight that *all* females aged 16 years and older should be questioned about their experiences of IPV and asked about probable fear from a current or past intimate partner (Fanslow & Kelly, 2016). Comparatively, men aged 16 years and older should be questioned only *if* they present with signs and symptoms indicating that they may be experiencing abuse (Fanslow & Kelly, 2016). Such apparent discrepancies in approaches to assessment for men and women stem from differences in prevalence and severity of IPV between the sexes (Fanslow & Kelly, 2016). However, as highlighted by the present findings, successful prevention of IPV is contingent on the implementation of gender inclusive policies and

interventions. Indeed, a sustained gender inclusive effort across all levels of society is needed in order to appropriately and effectively address the complex and pervasive issue of IPV (Mercy, Rosenberg, Powell, Broome, & Roper, 1993).

Limitations and Future Research

It is important to acknowledge the limitations of the current study. First, the current study utilised a young New Zealand university sample, and whilst research emphasises the importance of understanding IPV experienced by young males and females (e.g., Ministry of Justice, 2015), the present findings cannot be generalised to the wider population. Indeed, research suggests that younger populations internalise more sexist ideologies (Glick & Fiske, 1996), and disproportionately experience any form of IPV victimization relative to the general population (Ministry of Justice, 2015). Therefore, replication of the current study is needed using a representative New Zealand sample. In doing so, research will extend on existing literature by exploring the normative beliefs held at a wider societal level.

Secondly, prevention campaigns depicted acts of physical IPV in heterosexual relationships only. Whilst research has demonstrated the high prevalence rates of IPV between men and women (e.g., Ministry of Justice, 2015; Straus & Gelles, 1986), existing literature also illustrates the high rates of IPV experienced among same-sex couples (e.g., Waldner-Haugrud, Gratch, & Magruder, 1997). Indeed, rates of abuse within this population range from 9-41% (Freedner, Freed, Yang, & Austin, 2002), which is comparable to that of heterosexual couples. Despite this, much of the existing IPV literature focuses exclusively on heterosexual relationships, and consequently, limited ameliorative attempts have been put into practice to address the issue of IPV in homosexual relationships (Winn, Lockwood, & Riviello, 2007). Thus, future research could expand on the present study by exploring the effects of prevention campaigns that depict physical aggression within same-sex couples. Promoting campaigns that depict homosexual IPV may aid to broaden the public perception

of (a) what constitutes IPV, and (b) who experiences it. More specifically, instead of exploring the effects of gendered campaigns in isolation, future research should investigate the effects of campaigns depicting a montage of images, including heterosexual *and* homosexual IPV. In doing so, a greater understanding of how campaigns impact attitudes and the subsequent perpetration of violence can be achieved.

Although the current study adds to existing literature by exploring the efficacy of gendered campaigns on participants' endorsement of sexism and approval of IPV, the effects of campaigns on the subsequent perpetration of violence was not examined. Therefore, future research should aim to examine these relationships with participants who report on their own IPV. For example, the current study found a negative relationship between benevolent sexism and approval of male aggression for female participants. Thus, future research could explore if benevolent sexism is a protective factor for women exiting violent relationships. Moreover, the present study observed a positive relationship between benevolent sexism and approval of female aggression for male and female participants. Therefore, future research could examine whether women high in benevolent sexism are more likely to physically aggress against their male partner, and whether men high in benevolent sexism are more likely to tolerate female aggression in relationships. Additionally, the current study explored the short-term effects of campaigns, and thus no definitive conclusions can be drawn about the effectiveness of such campaigns in achieving prolonged attitudinal change. Moreover, whilst the current study found support for the use of gender inclusive campaigns in decreasing participants' approval of female aggression, it is important to note that this finding was not replicated across the two studies. Indeed, the importance of replication is stressed in scientific research and can aid in establishing confidence in the validity of findings and theories/phenomena from which they are based (Earp & Trafimow, 2015). This highlights the issues of accepting findings at face value and acknowledges the integral role of replication in the advancement of science. As

such, replication of the current findings must be achieved before any definitive conclusions about the efficacy of gender inclusive campaigns can be drawn. Additionally, future research should endeavour to utilise a longitudinal study so that the long-term effects of gendered campaigns can be explored.

Despite these limitations, the current study contributes to the existing literature by providing one of the first experimental studies exploring the efficacy of gendered IPV campaigns. In doing so, the current study employed a gender inclusive approach, investigating sexism and approval of IPV held among males *and* females. Additionally, campaigns depicted both male *and* female aggression, which is in line with national and international statistics indicating that men and women are equally likely to be both perpetrators, and victims, of IPV.

Summary of Findings and Conclusions

Specifically, the main findings of this thesis can be summarised as follows:

The collective normative belief of IPV among male and female university students was chivalrous in approach, rather than patriarchal – as the gendered theory promotes. Male students were found to be more approving of female aggression compared to female students. This suggests that prevention efforts should primarily aim to reduce approval of female aggression (especially for men) in order to achieve equality and subsequent reductions in IPV.

Approval of male to female and female to male IPV was driven primarily by benevolent sexism, and not hostile sexism – as the gendered theory suggests. This further highlights the tenuous nature of research demonstrating the role of patriarchal beliefs in the aetiology of male perpetrated IPV. With regards to approval of male to female aggression, benevolent sexism was found to be a protective factor for females (but not males), in that higher levels of benevolent sexism to women were related to lower levels of approval of male to female aggression, but only when there was no provocation from the female victim. Where

the participant perceived credible provocation (i.e., use of physical aggression or sexual infidelity), male and female participants were more approving of IPV by men to women. This finding highlights the need for prevention to address the reciprocal nature of IPV. It also shows the need to generalise prevention messages so that the public understand that IPV is not appropriate in a range of contexts, regardless of perceived provocation, and that alternative strategies, other than aggressive retaliation, exist. The message that violence under any circumstance is unacceptable needs to be disseminated. With regard to female to male aggression, a positive relationship between benevolent sexism and approval of female aggression (total and infidelity) was found for male and female participants. That is, higher levels of benevolent sexism toward women were related to higher levels of approval of female to male aggression. These findings highlight a need to target these benevolent sexist attitudes to reduce approval of female to male aggression, which, if accomplished, have the potential to reduce not only female to male aggression but also male to female aggression, as much IPV is reciprocal in nature. However, before doing so, it is important to consider any potentially negative consequences of advertising that women are aggressive in relationships. For example, although such campaigns may serve to reduce benevolent sexism to women, it is possible that this decrease *may* serve to increase approval of male to female aggression for both sexes, this is discussed in more detail below.

With regards to the effectiveness of the poster campaigns, regression analyses in both studies revealed that exposure to a poster depicting male to female aggression did not significantly change participants' approval of IPV or level of sexism in comparison to a control poster. This suggests that existing primary prevention campaigns that highlight the role of men (in isolation) in violent relationships are ineffective, they do not change the underlying theoretical constructs that they aim to change. This is unsurprising considering that, in general, people did not hold high levels of approval of male to female aggression in

the first instance – in other words, there was no effect that required change, so it is unsurprising that the poster did not elicit change. It may be argued that such posters maintain this floor effect of low approval of male to female aggression, however, in a climate of limited resources, it seems a fruitless exercise to promote maintenance of this approval status above other areas that do demonstrate room for change (approval of female to male aggression and high rates of benevolent sexism toward women). Indeed, participants exposed to the poster depicting female aggression approved of female aggression (total and infidelity) significantly less than participants who viewed a non-violent control poster. This was only observed in study two, and therefore, the replicability of these results is to be determined. However, considering that participants collectively approved of female aggression to men significantly more than male to female aggression (and this was especially true of men), this is the area of sexism and approval that has room for change. If equality between how the sexes are viewed is to be achieved, this study shows that the best target area for change concerning approval of IPV is approval of female aggression to men. Finally, exposure to the poster depicting female aggression decreased participants' endorsement of benevolent sexism, with females decreasing the most relative to baseline, however, this was only observed in study one. As noted above, while exposure to female aggression in campaign posters makes steps towards equality between how the genders are viewed, professionals need to consider the possibility that a decrease in benevolent sexism toward women *may* also serve to increase approval of male to female aggression, alongside decreases in approval of female to male aggression. Although this study did not find that the poster depicting a female aggressor was related to significant increases in approval of male to female aggression, it is clear that the results do require further replicability tests. In this case, the results of this study therefore raise important considerations for how such poster campaigns should be designed.

Presentation of the sexes aggression in isolation may not be the most fruitful way forward; it is recommended that further research determines the efficacy of a montage of gender inclusive images, depicting a variety of scenes of family violence, on change in the underlying theoretical constructs that should be altered via exposure to such scenes.

In conclusion, the results of this study demonstrate that, collectively, the New Zealand student sample studied were chivalrous in their nature of approval of IPV between the genders, and that benevolent sexism toward women was related to the chivalrous disapproval of male to female aggression (and approval of female to male aggression). These findings do not support a gendered perspective in explaining the aetiology of IPV. Rather, these results highlight that if equality between the sexes is to be achieved, and a reduction in IPV is to be achieved as a product of this, then prevention campaigns need to target a reduction in approval of female to male aggression and benevolent sexism toward women, or, at least this should form part of that campaign. This finding was supported by the ineffectiveness of poster campaigns depicting male to female aggression, and the positive effects found for the posters that depicted female to male aggression – although further replication of this finding is essential before it directs practice. Considered together, these findings illustrate that gender inclusive prevention efforts should be utilised as a mechanism to reduce societal acceptance, and use, of IPV. Existing interventions have demonstrated limited effectiveness in changing public approval and prevalence of IPV, which highlights the need to revolutionise the current approach to prevention efforts. Previous literature has established that benevolent sexism is related to a myriad of societal problems (e.g., rape) and IPV appears to be no different (Abrams et al., 2003; Bohner et al., 1998; Durán, Moya, Megías, & Viki, 2009). By effecting equality between the genders, this should theoretically reduce IPV between the genders, and considering the overlap of different forms of family violence it will also serve to reduce

family harm in general (Dixon & Browne, 2003). Additionally, campaigns should utilise an integrated approach aimed at generating change across multiple systems (Point Research Ltd., 2010). Therefore, campaigns not only need to consider the gender inclusive nature of IPV, but also educate that this societal problem happens to people of all races, ethnicities, marital statuses, sexualities, and across ages (Dixon & Graham Kevan, 2011). In doing so, an attitude that violence in the family *is not ok by anyone* may be generated, and it is this attitude that will likely provide the best chance of harm reduction across a range of types of family violence. Indeed, a sustained effort across all levels of society is needed to effectively address this complex issue, and thus, policy and practice should venture to adopt a gender inclusive approach to IPV prevention.

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Appendices

Appendix A: Posters

Male Aggressor



Female Aggressor



Non-violent image with people (control)



Non-violent image: no people (control)



Appendix B: Information and Consent Form (Study One, Part One)***EXPLORING THE UTILITY OF MEDIA CAMPAIGNS THAT
ADVERTISE INTIMATE PARTNER VIOLENCE*****INFORMATION AND CONSENT SHEET: Project # 24324**

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

Who are we?

Louise Dixon is a Reader/Associate Professor in Forensic Psychology at Victoria University of Wellington. Matt Crawford is a Senior Lecturer in Psychology at Victoria. Matt Hammond is a Lecturer in Psychology at Victoria. They are the lead researchers on this project. Shameela Allen is studying for her MSc in Forensic Psychology at Victoria University of Wellington and is conducting this project under the named academic's supervision as part of completing her degree.

What is the aim of the project?

This project investigates how useful messages of the kind used in media campaigns about intimate partner violence are in helping people to understand what intimate partner violence is. There are no restrictions placed on taking part in this project.

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 # 24324].

What is involved if I agree to participate?

You must complete the study in one sitting, you cannot stop taking part half way through and then resume from where you left off. **Please make sure you set aside at least 30 minutes to participate before starting each part of the study.** While you are participating, your responses will be stored in a temporary holding area as you move through the sections, but they will not be permanently saved until you complete all sections and you are given a chance to review your responses. You can stop participating in this study at any time, without giving a reason, up until you submit your completed questionnaire. If you choose to withdraw from the study before submitting your responses your data will not be saved and you will not receive credit. You will only receive the credits if you choose to complete the study and submit your responses.

If you agree to take part, you will complete two online studies one week apart. You must complete both parts to get your credits. Part One will require you to complete a questionnaire that will ask you to share your demographic details with us and to answer questions about what intimate partner violence means to you and your thoughts about gender roles. You will also be asked to read short scenarios which describe men and women aggressing against a partner and comment on these behaviours. The scenarios are short and hypothetical and describe physical violence occurring between two adults. For example, it may say ‘Alex repeatedly hit them in the body’. However, if you choose to participate, it is important that you understand you *may* experience some discomfort due to the content of some questions or pictures.

You will then be assigned a date by which you need to return to the online study to complete Part Two. Part Two will require you to briefly view a campaign poster that *may* depict a scene of interpersonal aggression and answer questions about the scene. You will also be asked about your views of intimate partner violence, gender roles and asked to comment on scenarios that describe men and women aggressing against their partner and comment on these behaviours (as detailed above). As stated above, if you choose to participate in this study, it is important that you understand you *may* experience some discomfort due to the content of some questions or pictures.

It will take you approximately 30 minutes to complete Part One of the study and 30 minutes to complete Part Two.

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

Privacy and Confidentiality

To protect your privacy, a randomly generated number that does not identify you will automatically represent all the information you provide. Your names or other identifying information will not be stored alongside your responses. This means that individual feedback on your responses will not be provided, however, a summary of aggregate results will be available on www.aggressionlab.com after March 2018.

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

What happens to the information that you provide?

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

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

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

- If you wish to discuss issues around aggression in relationships with someone, there are many avenues of free support, such as:
 - The Samaritans (0800 726 666);
 - The Family Violence Information Line (0800 456 450);
 - Lifeline Aotearoa (0800 543 354);
 - Youthline (0800 376633);
 - Victoria student counselling services (Appointments and general enquiries: Kelburn and Te Aro campus': 04-463 5310; Pipitea campus: 04-463 7474).

Thank you for considering participating in this research.

CONSENT TO PARTICIPATE

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

I agree to participate in this research, and I understand that checking (ticking) 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.

During this experiment, we ask that you comply with the following experiment requirements:

- 1) Please **maximize the size of your web browser** so that it covers your entire screen. Complete this experiment on a desktop computer, laptop computer, or large tablet, not on a mobile phone or similar device.
- 2) Please complete the experiment in a single session, and **do not leave the experiment to engage in other tasks**. So, don't check your mail, look at Facebook, send or read a text message, get up for a drink, etc.
- 3) Please **do not use your web browser's back or refresh buttons** at any point during the experiment.
- 4) Because this experiment requires your close attention, we ask that you **complete the experiment in an environment that is free of noise and distraction**. Please do not speak to anyone, or have anyone near you. Ideally, you would be alone in a quiet room, or in a room where other people are quiet (such as a library).

The reason we ask you to follow these instructions is to ensure the quality of the information you give us. We know from previous research that if you do take a break, chat with others, etc., it will impair your ability to do the tasks set in this experiment.

Appendix C: Information and Consent Form (Study One, Part Two)

***EXPLORING THE UTILITY OF MEDIA CAMPAIGNS THAT
ADVERTISE INTIMATE PARTNER VIOLENCE***

INFORMATION AND CONSENT SHEET: Project # 24324

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Thank you for returning to complete Part Two of this project. The following provides a brief reminder of the study information sheet that you read before participating in Part One. Please remind yourself of the nature of the study by reading the below carefully and decide whether or not you want to continue. If you do not continue, thank you for considering taking part.

Who are we?

Louise Dixon is a Reader/Associate Professor in Forensic Psychology at Victoria University of Wellington. Matt Crawford is a Senior Lecturer in Psychology at Victoria. Matt Hammond is a Lecturer in Psychology at Victoria. They are the lead researchers on this project. Shameela Allen is studying for her MSc in Forensic Psychology at Victoria University of Wellington and is conducting this project under the named academic's supervision as part of completing her degree.

What is the aim of the project?

This project investigates how useful messages of the kind used in media campaigns about intimate partner violence are in helping people to understand what intimate partner violence is. You must have completed Part One of the project one week ago before taking part in this project. This is the only restriction to participation.

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 # 24324].

What is involved if I agree to participate in Part Two?

You must complete this study in one sitting, you cannot stop taking part half way through and then resume from where you left off. **Please make sure you set aside at least 30 minutes to participate before starting the study.** While you are participating, your responses will be

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

You will next be required to briefly view a campaign poster that *may* depict a scene of interpersonal aggression and answer questions about the scene. You will also be asked about your views of intimate partner violence, gender roles and asked to comment on scenarios that describe men and women aggressing against their partner and comment on these behaviours. The scenarios are short and hypothetical and describe physical violence occurring between two adults. For example, it may say ‘Alex repeatedly hit them in the body’. However, if you choose to participate, it is important that you understand you *may* experience some discomfort due to the content of some questions or pictures.

It will take you approximately 30 minutes to complete this study.

You will receive one research credit on completion of this part of the study.

Privacy and Confidentiality

To protect your privacy, a randomly generated number that does not identify you will automatically represent all the information you provide. Your names or other identifying information will not be stored alongside your responses. This means that individual feedback on your responses will not be provided, however, a summary of aggregate results will be available on www.aggressionlab.com after March 2018.

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

What happens to the information that you provide?

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

- If you have any questions about this study, either now or in the future, please feel free to contact us using the details stated at the top of this information document.
- If you wish to discuss issues around aggression in relationships with someone, there are many avenues of free support, such as:

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

Thank you for considering participating in this research.

CONSENT TO PARTICIPATE

I have re-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 (ticking) 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.

During this experiment, we ask that you comply with the following experiment requirements:

- 1) Please **maximize the size of your web browser** so that it covers your entire screen. Complete this experiment on a desktop computer, laptop computer, or large tablet, not on a mobile phone or similar device.
- 2) Please complete the experiment in a single session, and **do not leave the experiment to engage in other tasks**. So, don't check your mail, look at Facebook, send or read a text message, get up for a drink, etc.
- 3) Please **do not use your web browser's back or refresh buttons** at any point during the experiment.
- 4) Because this experiment requires your close attention, we ask that you **complete the experiment in an environment that is free of noise and distraction**. Please do not speak to anyone, or have anyone near you. Ideally, you would be alone in a quiet room, or in a room where other people are quiet (such as a library).

The reason we ask you to follow these instructions is to ensure the quality of the information you give us. We know from previous research that if you do take a break, chat with others, etc., it will impair your ability to do the tasks set in this experiment.

Appendix D: Debriefing Statement***EXPLORING THE UTILITY OF MEDIA CAMPAIGNS THAT ADVERTISE
INTIMATE PARTNER VIOLENCE*****DEBRIEFING STATEMENT: Project # 24324**

Louise Dixon, Reader **Matt Crawford, Senior Lecturer** **Matt Hammond, Lecturer**
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+64 4 463 6548 +64 4 463 6702 +644 463 5649

Shameela Allen, MSc student
Shameela.Allen@vuw.ac.nz

Thank you for participating in this research study.

Family violence is the most common form of violent crime in many parts of the world (including New Zealand). One common form of family violence is between partners in intimate relationships. Professionals often attempt to reduce the problem through the use of media campaigns (such as posters, TV adverts, podcasts) to educate the general public about this social issue and to change or maintain perceptions that this form of violence ‘is ok’ to ‘it is not ok’.

However, despite public money being spent on such campaigns, there is a surprising lack of evidence exploring what the messages in these campaigns should be and how different messages impact public perceptions, or not. These are important concepts for professionals to know if they are to design effective campaigns that prevent intimate partner violence. Psychological science can be used to help understand these concepts.

This study did just that. It used an experimental design to test how acceptable people rated acts of heterosexual intimate partner violence after exposure to educative posters (similar to those you may find in real campaigns) that differed in their message about the likely gender of the aggressor and victim. In other words, it provided an *experiment* where all variables except the aggressor’s gender were held constant and people were randomly assigned to poster conditions. Therefore, any changes in people’s perceptions after exposure to the poster could be attributed to the aggressor’s gender in the poster and nothing else.

It is expected that, before being exposed to the poster, on average people are more intolerant of male to female aggression than vice versa. This is because current research shows that male to female aggression goes against chivalrous norms (benevolent sexism) that are prevalent in Western society that assume women should be protected and looked after by

men. It is anticipated that campaigns depicting male to female aggression will serve to maintain the existing intolerance of male to female aggression.

It is also anticipated that campaigns depicting female to male aggression will serve to increase intolerance of female to male aggression. Research shows that female to male aggression is more readily accepted in society than male to female aggression and that this acceptance may contribute to the reported abuse of men by their female partners. So arguably it is important to find ways to reduce this, as well as reducing male to female violence. Such results will promote the use of campaigns that advertise the problem of intimate partner violence, targeting the cessation of aggression to men *and* women.

However, it is also important to test whether the effects of campaigns depicting female violence increase the approval of violence to women. *We do not* want to promote campaigns that do this, so if this result is found we will not endorse this advertising strategy. This study is therefore a very important first step in determining what the public health message should be to prevent all form of intimate partner violence.

This is the first study in a series of studies, tests need to be conducted with posters that depict same sex couples, people from different ethnicities and ages so that effective messages can be determined for all. We acknowledge this and aim to explore such issues in the future.

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

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

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

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

Thank you once again for your help.

Sincerely,

Dr. Louise Dixon, Dr. Matt Crawford, Dr. Matt Hammond and Shameela Allen.

Appendix E: Information and Consent Form (Study Two)***EXPLORING THE UTILITY OF MEDIA CAMPAIGNS THAT
ADVERTISE INTIMATE PARTNER VIOLENCE*****INFORMATION AND CONSENT SHEET: Project # 24324**

Louise Dixon, Reader **Matt Crawford, Senior Lecturer** **Matt Hammond, Lecturer**
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+64 4 463 6548 +64 4 463 6702 +64 4 463 5649

Shameela Allen, MSc student
Shameela.Allen@vuw.ac.nz

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

Who are we?

Louise Dixon is a Reader/Associate Professor in Forensic Psychology at Victoria University of Wellington. Matt Crawford is a Senior Lecturer in Psychology at Victoria. Matt Hammond is a Lecturer in Psychology at Victoria. They are the lead researchers on this project. Shameela Allen is studying for her MSc in Forensic Psychology at Victoria University of Wellington and is conducting this project under the named academic's supervision as part of completing her degree.

What is the aim of the project?

This project investigates how useful messages of the kind used in media campaigns are that aim to prevent intimate partner aggression. You cannot take part in this study if you took part in Project #24324 in Trimester 1. However, there are no other restrictions placed on taking part in this project.

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 # 24324].

What is involved if I agree to participate?

You must complete the study in one sitting, you cannot stop taking part half way through and then resume from where you left off. **Please make sure you set aside at least 30 minutes to participate before starting the study.** While you are participating, your responses will be stored in a temporary holding area as you move through the sections, but they will not be permanently saved until you complete all sections and you are given a chance to review your responses. You can stop participating in this study at any time, without giving a reason, up until you submit your completed questionnaire. If you choose to withdraw from the study before submitting your responses your data will not be saved and you will not receive credit. You will only receive the credits if you choose to complete the study and submit your responses.

If you agree to take part, you will complete an online study. You will first be required to briefly view a campaign poster that *may* depict a scene of interpersonal aggression between two adults. You will be asked to answer questions about the particular poster shown to you. You will then be asked to complete a questionnaire that will ask you to share your demographic details with us and to answer questions about what intimate partner violence means to you and your thoughts about gender roles. You will also be asked to read short scenarios which describe men and women aggressing against a partner and comment on these behaviours. The scenarios are short and hypothetical and describe physical violence occurring between two adults. For example, it may say ‘Alex repeatedly hit them in the body.’

If you choose to participate, it is important that you understand you *may* experience some discomfort due to the content of some pictures.

It will take you approximately 30 minutes to complete this study.

You will receive 0.5 research credits upon completion of this study.

Privacy and Confidentiality

To protect your privacy, a randomly generated number that does not identify you will automatically represent all the information you provide. Your names or other identifying information will not be stored alongside your responses. This means that individual feedback on your responses will not be provided, however, a summary of aggregate results will be available on www.aggressionlab.com after March 2018.

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

What happens to the information that you provide?

The responses you provide will be collected and combined with other participants’ responses. We will then analyse the data, and look at overall patterns of responses. The results will be written up in the form of scholarly articles or presentations where we will talk about the general pattern of results. The lead researcher may also use your data in other related projects,

and share it with competent students and professionals. When any of these things occur — data is shared, results are described, articles are written, or scientific presentations are given—it will be impossible for anyone to identify you.

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

- If you have any questions about this study, either now or in the future, please feel free to contact us using the details stated at the top of this information document.
- If you wish to discuss issues around aggression in relationships with someone, there are many avenues of free support, such as:
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 - The Family Violence Information Line (0800 456 450);
 - Lifeline Aotearoa (0800 543 354);
 - Youthline (0800 376633);
 - Victoria student counselling services (Appointments and general enquiries: Kelburn and Te Aro campus: 04-463 5310; Pipitea campus: 04-463 7474).

Thank you for considering participating in this research.

CONSENT TO PARTICIPATE

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

I agree to participate in this research, and I understand that checking (ticking) 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.

During this experiment, we ask that you comply with the following experiment requirements:

- 1) Please **maximize the size of your web browser** so that it covers your entire screen. Complete this experiment on a desktop computer, laptop computer, or large tablet, not on a mobile phone or similar device.
- 2) Please complete the experiment in a single session, and **do not leave the experiment to engage in other tasks**. So, don't check your mail, look at Facebook, send or read a text message, get up for a drink, etc.

- 3) Please **do not use your web browser's back or refresh buttons** at any point during the experiment.

- 4) Because this experiment requires your close attention, we ask that you **complete the experiment in an environment that is free of noise and distraction**. Please do not speak to anyone, or have anyone near you. Ideally, you would be alone in a quiet room, or in a room where other people are quiet (such as a library).

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