What about the Male Victims? Exploring the Impact of Gender Stereotyping on Implicit

Attitudes and Behavioural Intentions Associated with Intimate Partner Violence

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Abstract

Although intimate partner violence (IPV) is considered stereotypically as a gendered phenomenon, empirical evidence contradicts such gender asymmetry in reported rates of victimisation and perpetration. The current research explored the impact of stereotype priming on implicit attitudes associated with IPV victimisation (Study 1) and perpetration (Study 2), and further examined behavioural intentions associated with hypothetical gendered scenarios of IPV. Participants recruited in the United Kingdom were primed with either stereotype congruent, incongruent or no information about IPV victimisation (Study 1, $n = 122$) or perpetration rates (Study 2, $n = 101$). They then completed an Implicit Association Test and reported their subjective norms, self-efficacy, behavioural intentions, and outcome expectancies pertaining to different scenarios depicting gendered IPV. Findings indicate that priming an incongruent stereotype did not impact significantly on implicit or explicit attitudes toward IPV. Gendered scenarios were found to be influential on explicit attitudes, with IPV less likely to be identified toward male victims and considered more acceptable compared to when the victim was female. Moreover, individuals reported feeling more capable and likely to intervene in an act of IPV when the victim was female compared to male, were more likely to report such an incident, and anticipated greater outcomes. These findings highlight the need for an inclusive research approach that recognises men's victimisation.

*Keywords***:** Intimate Partner Violence; Stereotypes; Implicit Association Test; Gender; Behavioural Intentions; Domestic Violence

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Traditionally, Intimate Partner Violence (IPV) has been considered a gendered

phenomenon with the perception that most victims are women (Dobash & Dobash, 1979;

Scarduzio, Carlyle, Lockwood Harris, & Savage, 2017; see Dutton & Nicholls, 2005 for a

critical discussion). This is supported by crime statistics in the United Kingdom indicating that

8.5% of women compared to 4.5% of men report having experienced some form of IPV within a

period of a year, equivalent to 1.4 million and 700,000 victims, respectively (Office for National

Statistics, 2015). Consequently, research has been dedicated to understanding this gender

asymmetry, focusing largely on the historically and socially constructed influence of patriarchy

in allowing men to control and dominate their female partners (Fisher, 2013; Sugarman &

Frankel, 1996; Walsh, Spangaro, & Soldatic, 2015). Indeed, statistics gathered from clinical

samples (e.g., men in prisons, women in shelters) indicate that most victims of IPV are women

(Johnson 1995, 2006; Lövestad, Löve, Vaez, & Krantz, 2017).

Crime surveys and clinical samples, however, may not be representative of true

victimisation rates. It is well documented that men are reluctant to report assaults or seek medical

help (Douglas & Hines, 2011; Drijber, Reijnders, & Ceelen, 2013; Felson & Paré, 2005; Galdas,

Cheater, & Marshall, 2005), which may be attributable to the societal perception of masculine

gender roles (e.g., self-reliance, emotional control and power; Addis & Mahalik, 2003).

Moreover, the lack of available services dedicated to male victims of IPV means that there is no

equivalent clinical victimisation sample (Bates, Graham-Kevan, Bolam, & Thornton, 2017).

Overcoming such limitations, research utilising large-scale community samples and self-reports

has revealed that women and men are equally aggressive and controlling in heterosexual intimate

relationships (Archer, 2000; Bates & Graham-Kevan, 2016; Bates, Graham-Kevan, & Archer, 2014) and that this aggression is often bidirectional (Langhinrichsen-Rohling, Misra, Selwyn, & Rohling, 2012; Whitaker, Haileyesus, Swahn, & Saltzman, 2007).

Although some research argues that men are more likely to perpetrate acts of IPV compared to women (Centers for Disease Control and Prevention, 2011; Menard, Anderson, & Godboldt, 2009), others argue that women are more frequently violent toward men (Archer, 2000; Dutton, 2006) and engage in more coercion and control (Bates et al., 2014). The antecedents of IPV perpetration for men and women are clearly complex, particularly when considering the various forms of aggression used (see Archer, 2000). Despite emerging reports of gender symmetry, negative gender role stereotypes pertaining to male IPV perpetration and female victimisation within heterosexual relationships prevail within Western society (Scarduzio et al., 2017 Seelau & Seelau, 2005). Specifically, societal views appear to frame men as perpetrators and women as victims of IPV.

Gender stereotypes relating to IPV perpetration and victimisation are potentially harmful; if society deems women to be the targets of IPV, then this is likely to be related to lower societal concerns surrounding male victimisation (Felson & Feld, 2009; Sorenson & Taylor, 2005). Highlighting the significance of this issue, research employing hypothetical gendered IPV scenarios has shown that individuals view an act of violence as less serious in cases where the victim is male and the perpetrator is female (Erickson et al., 2017; Scarduzio et al., 2017; Sylaska & Walters, 2014). Furthermore, women's violence is prone to be judged as contextually dependent, with individuals searching for wider, external explanations for such behaviour (Sorenson & Taylor, 2005). In support of this pattern, recent research has found that mock jurors are more likely to convict a man relative to a woman in intimate homicide cases, providing

explanations of self-defence and greater sympathy for women as explanations for their decisions (Hodell, Wasarhaley, Rose Lynch, & Golding, 2014). These widely held societal views might contribute to a greater reluctance for men themselves to report acts of IPV and to seek help compared to women because they feel that they do not have the support to speak about their own experiences (Felson & Paré, 2005). In turn, this under-reporting may result in male victimisation not being identified as a priority for increased funding or resource provision (Bates et al., 2017). This is a highly pertinent concern and calls for empirical evidence to identify the impact of stereotypical conceptions on others' intentions to recognise female perpetration and to report instances of male victimisation and people's perceptions of this as a crime.

Although the literature examining the impact of negative societal stereotypes on attitudes and associated behaviours is plentiful (Macrae, Stangor, & Hewstone, 1996; Nelson, 2009), little is known about the impact of stereotype priming in the context of IPV. *Stereotype priming* refers to conditions in which an individual's awareness of a known stereotype is activated (consciously or otherwise; Blair & Banaji, 1996), leading to behaviours consistent with that stereotype (Ambady, Paik, Steele, Owen-Smith, & Mitchell, 2004; Dijksterhuis & Bargh, 2001; Wheeler, Javis, & Petty, 2001; Wheeler & Petty, 2000). From this perspective, it is plausible that attitudes and behaviours associated with acceptance of male victimisation may differ based on whether a prime adheres to (congruent) or is divergent from (incongruent) gender-related stereotypes. Specifically, it may be expected that stereotype congruent primes (e.g., "higher female victim rates") will lead to greater recognition of female relative to male victimisation. Conversely, incongruent-stereotype primes (e.g., "there are equal rates of female and male victimisation") may play a role in dissociating victimisation as a women-only concept and promote more egalitarian attitudes. In turn, those who receive information that challenges the stereotype

(incongruent prime) might also be more motivated to report men's victimisation compared to those who receive a stereotype congruent prime.

Even when gender stereotypes are not endorsed explicitly, they may still operate without conscious awareness (i.e., implicitly). As such, it is particularly important to assess the influence of stereotype priming on implicit attitudes toward victims and perpetrators of IPV. Implicit attitudes are automatically activated evaluations and are measured through implicit attitude measures, such as the Implicit Association Test (IAT; Greenwald, McGhee, & Schwartz, 1998). Such measures proffer a more reliable means of assessing automatic associations, such as gender stereotyping, compared to explicit reports that have greater susceptibility to social desirability (Rohmer & Louvet, 2012). Furthermore, implicit biases have been found to strongly correlate with behaviour when assessing socially sensitive issues (Greenwald, Poehlman, Uhlmann, & Banaji, 2009; Nosek et al., 2009), however, there is debate as to whether changes in implicit attitudes translate into similar changes in behaviour (see Forscher et al., 2017; Nosek, Hawkins, & Frazier, 2012 for debates).

Within this reasoning, we consider presentation of stereotypically congruent information to be a key factor in determining potential effects on attitudes. That is, implicit attitudes toward IPV may be reinforced by stereotype congruent information about IPV victimisation (e.g., women more likely to be victims than men). Conversely, stereotype incongruent information (e.g., equal rates of victimisation) may weaken these implicit associations. In line with this argument, recent research has shown that priming counter-stereotypical exemplars may be one of the most effective interventions in changing prejudicial implicit attitudes (Lai et al., 2014). Accordingly, the current research aims to establish whether stereotype congruent or incongruent information can influence individuals' implicit endorsement of IPV victimisation and

perpetration as a gendered phenomenon. Evidence of this nature would be highly relevant,

particularly for enhancing societal acceptance of male victimisation and indeed female

perpetration.

  In addition to exploring implicit attitudes associated with gendered perceptions about

IPV, the current research aims to investigate behavioural intentions associated with hypothetical

gendered scenarios of IPV and the applicability of other key socio-cognitive factors in this

context. The Theory of Planned Behaviour (TPB; Ajzen, 1985, 1987, 1991; Ajzen & Madden,

1986) proposes that a number of explicit attitudes guides behavioural intentions (see Armitage &

Conner, 2001, for a meta-analyses), such as perceptions of subjective norms, self-efficacy, and

outcome expectancies. Subjective norms, in this case, refer to an individual's perception that

others would endorse a given behaviour (Rhodes, Jones, & Courneya, 2002), such as deciding

whether or not significant others would report an act of IPV. Self-efficacy relates to an

individual's perception of their ability to accomplish a particular task (Terry & O'Leary, 1995),

such as feeling confident to report an act of IPV. Finally, outcome expectancies refer to the

perception that a given behaviour will result in a desired outcome (Williams, Anderson, &

Winett, 2005), which is particularly relevant when considering whether an individual's intention

to report instances of IPV is underpinned by the belief that this would result in appropriate

punitive action.

  Underpinned by TPB and the widely held view of IPV as a gendered phenomenon, we

predict that individuals may report higher subjective norms, self-efficacy, behavioural intentions,

and outcome expectancies in instances of female victimisation and male perpetration. In addition

to this hypothesis, we also obtained measures of identification and acceptability of IPV relating

to hypothetical gendered scenarios. Here we expected individuals to identify male perpetration

and female victimisation as more violent or harmful behaviour and, correspondingly, less

acceptable compared to if the perpetrator was female and the victim male (de Groot & Steg,

2006).

Finally, we explored whether individuals' endorsement of hostile or benevolent sexist

beliefs correspond to their behavioural intentions associated with IPV. Hostile sexism reflects

negative stereotypes and evaluations about women, implying they are inferior to men. In

contrast, benevolent sexism reflects stereotypes that may appear more positive (e.g., women need

to be protected) but are still broadly damaging (Glick & Fiske, 1996). Societal patriarchy has

been proffered as one of the most prominent theoretical accounts of understanding IPV (Fisher,

2013; Sugarman & Frankel, 1996; Walsh et al., 2015) and beliefs about traditional gender roles

have been found to be linked to IPV behaviours, particularly in women (Bookwala, Frieze,

Smith, & Ryan, 1992; Santana, Raj, Decker, Marche, & Silverman, 2006). These beliefs are thus

worthy of empirical investigation in the context of implicit attitude endorsement and behavioural

intentions associated with IPV.

In two experiments, we experimentally manipulated the presentation of congruent and

incongruent gender stereotypes to examine their influence on implicit attitudes toward IPV

victimisation (Study 1) and perpetration (Study 2). In addition, we examined behavioural

intentions to report acts of IPV based on hypothetical gendered scenarios. Accordingly, both

studies were underpinned by three research questions: (a) To what extent do congruent and

incongruent stereotype primes impact upon implicit gendered attitudes relating to male

victimisation (Study 1) and female perpetration (Study 2)?; (b) To what extent does an

incongruent, relative to congruent, stereotype prime result in enhanced behavioural intentions to

report instances of male victimisation (Study 1) and female perpetration (Study 2)?; and (c) To

what extent do other socio-cognitive factors (i.e., self-efficacy, subjective norms, behavioural intentions, and outcome expectancies) vary in respect of scenarios depicting male versus female victimisation (Study 1) and male versus female perpetration (Study 2)?

## Study 1: IPV Victimisation

In Study 1 we examined the impact of stereotype priming on acceptance of IPV male victimisation. Specifically, we aimed to establish the extent to which stereotype incongruent relative to congruent information could enhance acceptance toward male IPV victimisation. Within this, we assessed implicit attitudes toward male versus female victimisation, as well as behavioural intentions to report male victimisation, using hypothetical scenarios. In addition, we focused on how stereotype priming and gendered hypothetical scenarios impacted upon self-efficacy, subjective norms, behavioural intentions, and outcome expectancies associated with reporting IPV victimisation.

**Method**

**Participants and design.** The study consisted of a 3 (Stereotype Condition: Stereotype Congruent, Incongruent, Control) x 2 (Vignette Victim gender: Female Victim, Male Victim) mixed-design, with stereotype condition as a between-participants factor and vignette victim gender as a within-participants factor. A total of 149 participants were recruited initially through an online survey, examining ostensibly "attitudes toward aggression." A total of 27 participants (18.12%) were removed from the final analyses for partially completing the online study, with this attrition rate lower than most online surveys (see Welch & Barlau, 2013). One participant was excluded subsequently from data analysis due to responding too quickly on the IAT (over 30% of trials < 300 ms; Greenwald et al., 2003). This resulted in a final sample of 122 participants ($M_{age}$ = 25.00, $SD$ = 10.10, range = 18–61); 90 (74%) women; 94 (77%) White

British, 11 (9%) Other White, 4 (3.2%) Asian or Asian British, 3 (2.5%) Black British, 3 (2.4%)

White Irish, 3 (2.4%) Other Mixed, with the remaining 4 (2.5%) preferring not to

identify/missing. These participants were assigned randomly to the stereotype congruent ($n =$

40), stereotype incongruent ($n = 39$) or control condition ($n = 43$) by a computer algorithm.

**Manipulations and measures.** Participants received one of three priming manipulations

that corresponded to the experimental conditions and pressed a computer key to confirm that

they had read the prime. Specifically, participants assigned to the stereotype congruent condition

read the following:

> As you may know, figures show that it is more common for women to be victims
>
> of intimate partner violence compared to men. Among people subject to four or
>
> more incidents of domestic violence from the perpetrator of the worst incident
>
> (since age 16) 89% were women.

Participants in the stereotype incongruent condition were primed with the following information:

"Recent research has found that there is an equal victimisation rate between males and females.

However, there is still a difference in people's perceptions of males versus female victimisation

of intimate partner violence."  Finally, we employed a control condition in which participants

were provided with general information about the nature of the study:

> We are interested in researching factors which are related to perceptions of
>
> domestic violence victimisation, specifically intimate partner violence (IPV)
>
> towards an opposite sexed other. In particular, this study aims to assess factors
>
> which might be associated with IPV perceptions and associated actions.

*Implicit attitudes: IPV victimisation.* After indicating that they had read the priming

information, participants completed an Implicit Association Test (IAT; Greenwald et al., 1998)

to measure their implicit attitudes toward IPV victimisation. This computerised task works on the premise that people should be quicker to match attributes with superordinate concepts when they are associated strongly in memory compared to concepts that are associated weakly (Greenwald et al., 1998). The IAT was completed via an online JAVA-based platform and required participants to categorise various evaluative attributes (e.g., Strong/Weak, Dominant/Passive, Aggressive/Non-aggressive, Woman/Man, Female/Male) into four superordinate categories of "Female Victim", "Male Victim", "Strong" and "Weak." Participants completed seven blocks of the IAT, undergoing 20 trials on practice blocks and 40 trials on critical blocks, with blocks counterbalanced between participants (Greenwald et al., 1998). IAT *d*-scores were computed in line with a recommended scoring algorithm (c.f., Greenwald, Nosek, & Banaji, 2003; Nosek, Greenwald, & Banaji, 2005). Positive *d*-scores indicate that participants were quicker to associate "Male Victim – Strong" and "Female Victim – Weak" compared to the reversed mapping (negative *d*-scores), thus revealing a stronger implicit attitude to consider women as "weak" and men as "strong". IAT scores are bound between -2.00 and +2.00, and in line with Cohen's (1992) effect size guidelines, associations can be categorised as small (.20), medium (.50), and large (.80).

     ***Socio-cognitive outcomes.*** Upon completing the IAT, participants read two gendered scenarios in a vignette depicting the following heterosexual instance of IPV toward a male or female victim: "Your [male/female] friend comes to you extremely agitated and says [his/her] [girlfriend/boyfriend] hit [him/her] last night. You can see that your friend is very panicky." After each gendered scenario, they completed an 8-item questionnaire to assess socio-cognitive outcomes (adapted from the existing literature on TPB; Terry, Hogg, & White, 1999). Specifically, they answered  two items each on *subjective norms* ("My friends and peers would

report if they witnessed this" and "Most of my friends and peers think that me reporting in this

instance would be desirable"), *self-efficacy* ("I feel confident I would be able to report this" and

"I would find it difficult to report this")*, behavioural intentions* ("I would report if I witnessed

this" and "I would tell my friend to report this"), and *outcome expectancies* ("I would expect that

if I was to report, this would result in appropriate action" and "I expect this situation could be

easily resolved"). Participants responded to these items on a 5-point scale from 1 (*strongly*

*disagree*) to 5 (*strongly agree*). Each item for the four socio-cognitive subscales correlated

significantly with its corresponding item for both the female (all $r > .37$, $p < .001$) and male (all

$r > .42$, $p < .001$) vignette conditions. A mean score was computed for each subscale for

analysis.

     ***Identification and acceptability of IPV behaviours.*** Based on each of the vignettes,

participants were asked to complete one question each that assessed their identification of the

behaviour as an act of IPV: "To what extent do you perceive that this scenario is referring to an

act of intimate partner violence", rated from 1 (*Not at all*) to 5 (*Definitely*). They also completed

a second item to assess the perceived acceptableness of the behaviour: "Please indicate the extent

to which you perceive the act being referred to was acceptable," rated from 1 (*Not at all*

*acceptable*) to 5 (*Definitely acceptable*).

     ***Beliefs about sexism***. Sexist beliefs were measured using the Ambivalent Sexism

Inventory (Glick & Fiske, 1996). This 22-item measure consists of two subscales; benevolent

sexism (e.g., "Women should be cherished and protected by men") and hostile sexism (e.g.,

"Women are too easily offended"), with respondents answering on a 6-point scale from 0

(*strongly disagree*) to 5 (*strongly agree*). Two items were removed from the benevolent sexism

subscale (items 3 and 6) to increase internal consistency (Cronbach's $\alpha = .74$) and two items

were removed from the hostile sexism sub-scale (items 7 and 18) to increase internal consistency

($\alpha = .80$). A mean score was computed for each subscale such that higher scores indicate greater

sexism.

**Procedure.** Participant recruitment was undertaken through online advertising, and

participants were instructed to complete the online experiment in a quiet location without

distractions. After reading the briefing sheet and providing informed consent, participants were

randomly assigned to one of three stereotype conditions in which they were primed with either

stereotype congruent, incongruent or no information (control) regarding rates of IPV

victimisation. They then indicated that they had read the priming information by pressing an

assigned computer key, after which the IAT was presented automatically. The IAT was

counterbalanced so that each participant started on a different trial-type, and stimulus items were

presented quasi-randomly across blocks. Upon completing the IAT, participants received two

hypothetical gendered vignettes, one depicting an instance of male IPV victimisation and another

depicting female victimisation. These were not counterbalanced. Based on each of the vignettes,

participants were asked to complete two questions that assessed their identification of the

behaviour as an act of IPV and the acceptableness of this behaviour. They were then asked to

complete questions regarding subjective norms, self-efficacy, outcome expectancies, and their

behavioural intentions to report this act of IPV. Finally, they completed a measure of benevolent

and hostile sexism before being debriefed.

**Analytic strategy.** A one-way between-subjects Analysis of Variance (ANOVA) was

first conducted to examine the influence of stereotype condition on implicit attitudes toward IPV,

with a follow-up one-sample *t*-test conducted to assess participants' implicit attitudes against a

test value of zero (neutral stereotype endorsement). A series of 3 (Stereotype Condition:

Stereotype Congruent, Incongruent, Control) x 2 (Victim gender: Female Victim, Male Victim)

ANOVAs were conducted to explore the impact of stereotype condition and gendered vignette

condition on subjective norms, self-efficacy, behavioural intentions, and outcome expectancies.

Bonferroni corrections were address possible Type I error. We then assessed non-significant

effects for pairwise comparisons of focal interest using equivalence tests (see Lakens, 2017;

Lakens, Scheel, & Isager, in press; for theory; McCarthy et al., 2018 for working example). Here

we specified a moderate effect size ($d$ $\Delta L$ = - .50, $\Delta U$ = + .50; Cohen, 1992) as our smallest

effect size of interest (SESOI) in line with prior studies showing that counter-stereotypic

exemplars reduce implicit associations (Lai et al., 2014). A significant TOST result indicates that

the comparison was statistically within the equivalence bounds and we did not detect our SOSOI.

Conversely, a non-significant equivalence test indicates that the data are inconclusive (i.e., the

confidence interval encroaches the equivalence bounds on one side of the test; see Ialongo,

2017). Supplementary File 1 in the online supplement provides detailed analyses.

**Results**

      **Implicit attitudes.**  There was no significant main effect of stereotype condition on

implicit attitudes toward IPV, $F(2, 119) = .09$, $p = .915$, $\eta_p^2 = .001$. Specifically, priming

stereotype congruent, incongruent or no information pertaining to IPV victimisation rates did not

appear to influence implicit attitudes. Equivalence tests indicated that the observed effect sizes

were statistically within the equivalence bounds and smaller than our SESOI, $p < .05$. A one-

sample $t$-test (with a test value of zero denoting a neutral preference) indicated that participants'

displayed a weak stereotype endorsement ($M = .19$, $SD = .33$) that males victims were strong and

females victims weak, $t(121) = 6.38$, $p < .001$.

**Socio-cognitive outcomes.** There was a significant main effect of victim gender on subjective norms, $F(1, 119) = 134.39$, $p < .001$, $\eta_p^2 = .53$. Pairwise comparisons indicated that participants reported significantly higher subjective norms for the female victim relative to the male victim condition (see Table 1 for means). There was no significant main effect of stereotype condition, $F(2, 119) = 2.90$, $p = .087$, $\eta_p^2 = .04$, and no interaction between stereotype condition and victim gender, $F(2, 119) = 1.90$, $p = .154$, $\eta_p^2 = .03$. The observed effect sizes between the stereotype incongruent and congruent condition, as well as the stereotype incongruent and control condition, for the male victim vignette were not significantly within the equivalent bounds ($p > .05$), suggesting that the data are inconclusive.

Similarly, there was a significant main effect of victim gender on self-efficacy, $F(1, 119) = 47.33$, $p < .001$, $\eta_p^2 = .29$, with participants reporting that they felt more capable of intervening in an act of IPV toward a female relative to male victim (see Table 1). There was no significant main effect of stereotype condition, $F(2, 119) = 1.92$, $p = .152$, $\eta_p^2 = .03$, and no interaction between stereotype condition and victim gender, $F(2, 119) = .1.78$, $p = .173$, $\eta_p^2 = .03$. The observed effect sizes between the stereotype incongruent and congruent condition, and the stereotype incongruent and control condition for the male victim vignette were not significantly within the equivalent bounds ($p > .05$) and the data are inconclusive.

There was also a significant main effect of victim gender on behavioural intentions, $F(1, 119) = 36.04$, $p < .001$, $\eta_p^2 = .23$, with participants indicating that they would feel more likely to report an incident of IPV when the victim was female compared to male (see Table 1). There was no significant main effect of stereotype condition, $F(2, 119) = .16$, $p = .852$, $\eta_p^2 = .003$, and no significant interaction between stereotype condition and victim gender, $F(2, 119) = .06$, $p = .938$, $\eta_p^2 = .001$. The observed effect size between the incongruent and control condition for the male

victim vignette was significantly within the equivalent bounds ($p < .05$). However, the effect size

between the incongruent and congruent condition for the male vignette was not significantly

within these equivalence bounds ($p > .05$). Overall, this suggests that stereotype incongruent

information may not increase behavioural intentions to report an act of IPV against a male

victimisation compared to stereotype congruent information.

Finally, there was a significant main effect of victim gender on outcome expectancies,

$F(1, 119) = 75.75$, $p < .001$, $\eta_p^2 = .39$, with participants anticipating greater expectancies of

action being taken when reporting a female compared to male IPV victim (see Table 1). There

was no significant main effect of stereotype condition for outcome expectancies, $F(2, 119) = .68$,

$p = .509$, $\eta_p^2 = .01$, but there was a significant interaction between stereotype condition and

victim gender, $F(2, 119) = 3.10$, $p = .049$, $\eta_p^2 = .05$. Pairwise comparisons indicated that

participants in the stereotype congruent, incongruent, and control conditions all reported that

they would anticipate greater outcomes for female compared to male victims. This difference

was significantly greater for the stereotype incongruent condition ($p < .001$, $d = 1.08$) compared

to both the control ($p < .001$, $d = .58$) and stereotype congruent conditions ($p < .001$, $d = .82$).

The observed effect sizes between experimental conditions for the male vignette, however,

suggest that the data are inconclusive ($p > .05$).

In respect of the additional measures of identification and acceptability of the behaviour

depicted in the vignette, two paired sample $t$-tests were performed between vignette conditions

(i.e., victim gender). These analyses revealed that participants accurately identified the act as

IPV, but they were more likely to identify this act toward a female ($M = 4.51$, $SD = .75$)

compared to a male victim ($M = 4.18$, $SD = .90$), $t(121) = 4.38$, $p < .001$, $d = .39$. Similarly,

although participants indicated the behaviour in the vignette was not acceptable, it was seen as

significantly less so when the victim was female ($M = 1.12$, $SD = .40$) compared to when the

victim was male ($M = 1.34$, $SD = .61$), $t(121) = -3.72$, $p < .001$, $d = .43$.

Finally, correlation analyses explored the relationship between implicit attitudes and

explicit socio-cognitive outcomes with hostile and benevolent sexist attitudes. Findings indicated

that there was a weak, negative relationship between both benevolent and hostile sexism and

perceived behavioural intentions in the male vignette condition (see Table 2). In addition, there

was a weak, negative relationship between hostile sexism and self-efficacy in the male vignette

condition. This suggests that as benevolent and hostile sexism increased, there was less

anticipated intention to act when the victim was male. Moreover, as hostile sexism increased,

individuals felt they were less able to act when the victim was male. Furthermore, there was a

weak, positive relationship between the IAT scores and hostile sexism, for both the male victim's

and female victim's vignette; this suggests their implicit attitudes were consistent with these

perceptions of traditional gender roles for either victim type. There were no other significant

relationships between benevolent or hostile sexism and the other socio-cognitive outcomes for

the female and male vignettes ($p$s > .05).

**Discussion**

Study 1 explored the impact of stereotype priming on both implicit attitudes and

perceptions associated with hypothetical instances of male and female IPV victimisation. The

findings indicate that priming either congruent or incongruent stereotypes pertaining to IPV

victimisation did not impact significantly on implicit attitudes or socio-cognitive factors. The

only significant pattern was that participants were quicker to associate female victims with

"weak" and male victims with "strong." This finding suggests that priming participants with

information that similar numbers of men and women experience IPV may not be effective in

dissociating implicit endorsements of gendered victimisation. Further, these stereotype primes did not appear to significantly influence explicit attitudes regarding intentions to act, the ability to intervene, or perceptions of subjective norms surrounding male IPV victimisation, with equivalence tests indicating the data are inconclusive.

Nevertheless, gendered scenarios depicting IPV had a significant impact on socio-cognitive attitudes with participants reporting higher subjective norms, self-efficacy, behavioural intentions, and outcome expectancies when the victim depicted in the vignette was female compared to male. Additionally, although participants identified the behaviour as IPV and generally rated it as unacceptable, they were significantly more likely to identify this behaviour as an act of IPV and less likely to see it as acceptable when the victim was female relative to male. Finally, both benevolent and hostile sexism were negatively associated with behavioural intentions for the male vignette, and hostile sexism was negatively associated with self-efficacy. That is, higher sexism endorsement was related to lower perceptions of feeling able to intervene and act, but only in cases where the victim was male.

### Study 2: IPV Perpetration

The findings of Study 1 indicate that presenting incongruent stereotypes may not be effective in reducing both implicit and explicit attitudes toward IPV victimisation, with attitudes toward male victims appearing to be particularly unfavourable. Specifically, individuals are much less likely to identify IPV toward a man and, worryingly, view it as more acceptable compared to the same behaviour shown toward a woman. Correspondingly, they may be less likely to intervene and feel that any preventative actions may not result in appropriate action being taken. Study 2 aimed to extend these findings, focusing on IPV perpetration to establish whether attitudes surrounding gendered IPV are isolated solely to victimisation or also reside in

attitudes toward perpetration. Specifically, it is not entirely clear whether the stigma associated with male victims is in respect of men themselves being victims or toward women as perpetrators. Accordingly, Study 2 aimed to examine the influence of stereotype priming on attitudes toward IPV perpetration and whether the gender of the perpetrator influenced behavioural intentions to report instances of IPV.

**Method**

      **Participants.** The study consisted of a 3 (Stereotype Condition: Stereotype Congruent, Incongruent, Control) x 2 (Vignette Perpetrator Gender: Female Victim, Male Victim) mixed-design. A total of 153 UK participants were recruited initially through an online survey, with a total of 43 (28.10%) removed for not completing the study fully and nine for completing the IAT too quickly. This resulted in a final sample of 101 UK participants ($M_{age} = 26.48$, $SD = 9.24$, range = 18–62); 59 (58%) women; 76 (75.2%) White British, 10 (9.9%) Other White, 3 (4%) Other Mixed, 4 (4%) Asian British, 2 (2%) Black British, 2 (2%) Chinese, 2 (2%) Other Asian, with the remaining 2 (2%) preferring not to identify. Participants were randomly assigned to the stereotype congruent ($n = 34$), incongruent ($n = 35$) or control condition ($n = 32$) by a computer algorithm.

      **Manipulations and measures.** All measures and procedures were equivalent to those employed in Study 1. The only exception was that the stereotype primes and the IAT target categories referred to IPV perpetration rather than victimisation. Two items were removed from the benevolent sexism scale (items 6 and 13; $a = .71$) and one from the hostile sexism scale (item 1; $a = .67$) of the ASI to increase internal consistency. Consistent with Study 1, inter-item correlations were all significant for both the female (all $r > .59$, $p < .001$) and male vignettes (all $r > .51$, $p < .001$).

*Stereotype priming manipulation.* Participants assigned to the stereotype congruent condition were primed with the following information: "As you may know, figures show that it is more common for men to perpetrate acts of intimate partner violence compared to women. There is also a difference in people's perceptions of males versus female perpetration of intimate partner violence." Participants in the stereotype incongruent condition were primed with the following information: "Recent research has found that there are no differences between men and women in rates of intimate partner violence perpetration. However, there is still a difference in people's perceptions of males versus female perpetration of intimate partner violence." In line with Study 1, a control condition was utilised in which participants were briefed with general information about the nature of the study. Upon reading these stereotype primes and completing the IAT, participants read two gendered scenarios in a vignette depicting a heterosexual instance of IPV toward a male or female perpetrator: "Your [male/female] friend comes to you and tells you that [he/she] hit [his/her] [girlfriend/boyfriend] last night." Participants then went on to complete measures of outcome expectancies, subjective norm, self-efficacy, and behavioural intentions.

**Results**

**Implicit attitudes.** A one-way between-subjects ANOVA revealed no significant impact of stereotype condition on implicit attitudes toward IPV perpetration, $F(2, 98) = 2.13$, $p = .124$, $\eta_p^2 = .04$. The effects observed between the stereotype incongruent and control condition, as well as the stereotype incongruent and congruent condition, were not significantly within the equivalent bounds, suggesting the data are inconclusive. A follow-up one sample *t*-test revealed that, consistent with Study 1, participants showed a weak stereotype endorsement ($M = .18$, $SD = .32$) that male perpetrators were strong and females weak, $t(100) = 5.64$, $p < .001$.

**Socio-cognitive outcomes.** A series of 3 (Stereotype Condition: Stereotype congruent, Incongruent, Control) x 2 (Vignette Perpetrator Gender: Female Perpetrator, Male Perpetrator) ANOVAs were conducted to explore the impact of stereotype condition and perpetrator gender on subjective norms, self-efficacy, behavioural intentions, and outcome expectancies. Bonferroni corrections were applied to reduce familywise error. For subjective norms, a significant main effect of perpetrators gender was found, $F(1, 98) = 99.43$, $p < .001$, $\eta_p^2 = .50$, with participants reporting significantly higher subjective norms for the male perpetrator vignette (see Table 3). There was no significant main effect of stereotype condition, $F(2, 98) = .94$, $p = .395$, $\eta_p^2 = .02$, and no interaction between stereotype condition and perpetrator gender, $F(2, 98) = 1.52$, $p = .224$, $\eta_p^2 = .03$. The observed effects between the stereotype incongruent and control condition, as well as the stereotype incongruent and congruent condition, for the female perpetrator vignette was not significantly within the specified equivalence bounds, suggesting the data are inconclusive.

Similarly, there was a significant main effect of perpetrators gender on self-efficacy, $F(1, 98) = 13.03$, $p < .001$, $\eta_p^2 = .12$, with participants reporting they felt more capable of intervening in the instance of a male compared to female perpetrator (see Table 3). No significant main effects of stereotype condition were found, $F(2, 98) = .67$, $p = .513$, $\eta_p^2 = .01$, and there was no interaction between stereotype condition and perpetrator gender, $F(2, 98) = .26$, $p = .771$, $\eta_p^2 = .01$. The observed effects between the stereotype incongruent and control condition, as well as the stereotype incongruent and congruent condition, for the female perpetrator vignette were not significantly within the equivalent bounds, suggesting the data are inconclusive.

There was also a significant main effect of perpetrator gender on behavioural intentions, $F(1, 98) = 58.47$, $p < .001$, $\eta_p^2 = .37$, with participants indicating they would be more likely to

report an incident of IPV if the perpetrator was male compared to female (see Table 3).

However, there was no significant main effect of stereotype condition, $F(2, 98) = .90$, $p = .412$,

$\eta_p^2 = .02$, and no interaction between stereotype condition and perpetrator gender, $F(2, 98) = .19$,

$p = .830$, $\eta_p^2 = .004$. The observed effect between the stereotype incongruent and control

condition for the female perpetrator vignette was not significantly within the specified

equivalence bounds; however, the effect between the congruent and incongruent condition for

the female vignette was significantly equivalent. As such, stereotype incongruent information

regarding IPV perpetration did not appear to enhance behavioural intentions to report a female

perpetrator of IPV compared to stereotype congruent information.

There was a significant main effect of perpetrator gender on outcome expectancies, $F(1,$

$98) = 56.22$, $p < .001$, $\eta_p^2 = .37$, with participants feeling that action would more likely be taken

against a male compared to female perpetrator of IPV (see Table 3). There was, however, no

significant main effect of stereotype condition, $F(2, 98) = .68$, $p = .510$, $\eta_p^2 = .01$, and no

interaction between stereotype condition and perpetrator gender, $F(2, 98) = 2.26$, $p = .110$, $\eta_p^2 =$

$.04$. The observed effect between the stereotype incongruent and control condition for the female

perpetrator vignette was not significantly within the equivalent bounds. However, the effect

between the congruent and incongruent condition for the female perpetrator vignette was

significantly equivalent. This suggests that stereotype incongruent information regarding IPV

perpetration did not appear to enhance perceived outcomes that reporting a female perpetrator of

IPV would result in a desired outcome, compared to stereotype congruent information.

In respect of the additional measures of identification and acceptability of the behaviour

depicted in the vignette, two paired sample $t$-tests were performed. These analyses revealed that

although participants accurately identified the act as IPV, they were more likely to identify this

act when it was perpetrated by a man ($M$ = 4.66, $SD$ = .64) compared to a woman ($M$ = 4.26, $SD$

= .99), $t(100)$ = 4.34, $p < .001$, $d$ = .47.  Similarly, although participants indicated the behaviour

in the vignette was not acceptable, it was seen as significantly less so when the perpetrator was

male ($M$ = 1.22, $SD$ = .58) compared to when the perpetrator was female ($M$ = 1.63, $SD$ = 1.01),

$t(100)$ = - 4.39, $p < .001$, $d$ = .50.

Finally, correlation analysis examined whether implicit attitudes or socio-cognitive

outcomes correlated with hostile and benevolent sexist attitudes (see table 4). There was a weak,

negative relationship between hostile sexism and behavioural intentions in both the male and

female victim vignette. This suggests that those scoring higher on the hostile sexism scale were

less likely to anticipate intervening in either gendered scenario. Additionally, there was a

moderate negative relationship between benevolent sexism and identification of IPV in the

vignette with a female perpetrator. This suggests that as benevolent sexism increases, individuals

are less likely to identify a violent act by a woman as an instance of IPV. There were no other

significant relationships between benevolent and hostile sexism and the implicit and socio-

cognitive outcomes for the female and male vignette ($p$s > .05).

**Discussion**

Study 2 explored the impact of stereotype priming on both implicit and explicit

perceptions associated with male and female perpetration of IPV. Findings indicate that priming

stereotype congruent or incongruent information did not significantly influence participants'

implicit endorsement of gendered IPV perpetration or their behavioural intentions associated

with reporting IPV. However, it is important to note that equivalence testing indicated that the

data are inconclusive, suggesting that future studies are required with larger sample sizes to

elucidate the impact of stereotype priming on implicit and explicit attitudes toward IPV

perpetration and to provide reliable estimates of effect size.

Consistent with Study 1, participants revealed a weak implicit stereotype endorsement,

perceiving male perpetrators as "strong" and female perpetrators as "weak." In contrast, the

gender of the perpetrator depicted in the hypothetical vignettes was found to be impactful upon

explicit attitudes toward IPV. Specifically, subjective norms, self-efficacy, behavioural

intentions, and outcome expectancies were significantly higher during instances of male

compared to female perpetration. Although participants identified the behaviour as IPV and

generally rated it as unacceptable, they were significantly more likely to identify the behaviour in

this vignette as IPV and less likely to see it as acceptable when the perpetrator was male

compared to female. Indeed, this pattern shows the opposite direction of effects compared to

Study 1 whereby victimisation was depicted, highlighting the worrying indication that

participants perceive female victimisation and male perpetration as more unacceptable when

compared to male victimisation and female perpetration.

### General Discussion

The studies presented here explored both implicit and explicit attitudes associated with

hypothetical instances of IPV. These were framed in respect of victimisation (Study 1) and

perpetration (Study 2) to assess whether priming congruent or incongruent stereotypes would

strengthen or lessen gendered attitudes toward IPV. Across both studies, the findings indicated

that there was no significant impact of gender stereotype priming on implicit or explicit attitudes

toward IPV victimisation or perpetration, with equivalence tests indicating that the data are

inconclusive. Rather, the findings indicate that participants implicitly held stereotypical beliefs

of women being perceived as "weak" and men as "strong" regarding IPV perpetration and

victimisation. Furthermore, although participants identified IPV behaviour in both vignettes and

rated it as unacceptable, there was a clear perception that violence between partners involving a

male perpetrator and female victim was more readily identified as IPV and judged as more

unacceptable compared to when the perpetrator was female and the victim male. Furthermore,

these characterisations are associated with participants' perceptions about their ability to

intervene and their intentions to report male victimisation (Study 1) and female perpetration

(Study 2).

It could be argued that gender stereotypes relating to IPV victimisation and perpetration

are deeply ingrained within societies, and it is therefore not surprising that incongruent

stereotypes did not have a significant influence on implicit attitudes or self-reported perceptions

associated with IPV. This explanation is supported by the finding that across both studies,

participants showed an implicit endorsement for perceiving women as "weak" and men as

"strong" regarding IPV, regardless of stereotype condition. This pattern is indicative of how

normative societal perceptions are, and it highlights the need for research to investigate and

remedy these issues.

The issues presented around attitudes toward male victims are apparent, but what is less

clear is whether the stigma and stereotypes stem from the dissonance of men as victims or

women as perpetrators. As such, Study 2 helped elucidate this issue and found equivalent

outcomes for depictions of male victimisation and female perpetration. This is perturbing

because campaigns which aim to increase acknowledgement of men's victimisation may not

benefit from presenting information regarding equal victimisation and perpetration rates between

men and women. Indeed, research within the social psychological literature suggests that the

development of gender roles and norms around gender-appropriate behaviour develop early in

childhood and are then socially reinforced throughout adulthood (Bussey & Bandura, 1999). This

may influence the endorsement of stereotypes about gender, violence, and victimisation and

highlights the significant challenge of changing and reducing such perceptions. Simply raising

awareness of the diversity of IPV victims may not be impactful enough in addressing the

inherent nature of these stereotypes, which suggests that gender norms need tackling earlier in

socialisation before they become too rigid. This is supported by research which suggests that

men may be unlikely to report instances of IPV because they feel embarrassed for not confirming

to dominant societal expectations (Hogan, 2016). One way of tacking these ingrained stereotypes

and reducing the stigma associated with male victimisation might be to encourage men to share

their stories and experiences of IPV.

It could be argued that the inconclusive influence of stereotype primes on implicit and

explicit attitudes may be that the primes employed were not personalised or emotive enough to

change attitudes. Further, the context of priming plays an important role in the effectiveness of

their messages (Kindermann, 2017). As such the current study may have benefited from using

more personalised primes, such as encouraging the person to imagine their friends in a stereotype

congruent or incongruent situation and how they would feel, or to show a video vignette

depicting a male/female perpetrator and victim in an instance of IPV. From a practical

perspective, this suggests that the usual informational or factual campaigns may best capitalise

on a more personalised or emotive approach to be more effective in awareness-raising and in

encouraging behaviour-change.

Across both studies, participants were also more likely to perceive instances involving

male victimisation (Study 1) and female perpetration (Study 2) as more acceptable and less likely

to be identified as acts of IPV than female victimisation and male perpetration. This perception

supports previous research which has found that people perceive violence against women as being more serious than toward men and that they will search for external attributions for women's violence (Erickson et al., 2017; Harris & Cook, 1994; Hodell et al., 2014; Sorenson & Taylor, 2005). Further, research has demonstrated that individuals are more likely to condemn and report men's assaults on women compared to any other gender combination, regardless of the level of violence that may have been committed by a woman (Felson & Feld, 2009). These findings, coupled with those from the current study, indicate there is a need to address perceptions of women's aggression and ensure it is taken as seriously as men's.

It is disappointing to see that efforts of awareness training within the last decade may not have impacted considerably on how we generally perceive male victims of IPV, with negative stereotypes still prevailing (Scarduzio et al., 2016). This failure creates lower societal concern surrounding male victims, and thus compounds the stigma that they experience and the likelihood of them reporting IPV (e.g., Felson & Feld, 2009). When outside the home, men are more likely to be involved in same-sex non-intimate aggression (Archer, 2004), which impacts on the stereotype of them being the more aggressive sex, and consequently means their motives around aggression are often not explored. In contrast, people often seek to understand women's motivations when they are aggressive (e.g., self-defence, psychopathology) because it creates dissonance with what we understand as socially appropriate behaviour for women (Bates, in press). This can be impactful when we do consider women's violence in the criminal justice system, with some studies suggesting jurors may have more sympathy for women and be more lenient with them (Hodell et al., 2014).

Some feminist models suggest patriarchy is the social norm that is most influential to IPV (e.g., Dobash & Dobash, 1979).  Indeed, although we found that hostile and benevolent sexism

were related to behavioural intentions, these did not correlate with the other socio-cognitive

attitudes or implicit perceptions. Felson (2002) suggests that chivalry is in fact more prominent

in inhibiting men's violence toward women. Chivalry dictates that men (and other women)

should protect women from harm, and it means that there is a greater moral condemnation of

violence when the victim is a women and also more serious punishments for the offenders.  This

notion is supported by studies showing women are consistently more likely to receive help from

men, with men being more likely to give help than women (Eagly & Crowley, 1986).  These

gender differences have been found to be more pronounced when there were audiences present

(Eagly & Crowley, 1986), suggesting that this chivalrous effect is normative.

**Limitations and Future Research Directions**

The current research has several limitations that warrant acknowledgement. The first is

that we only explored perceptions of IPV associated with heterosexual relationships. Less

research has been conducted more generally to investigate perceptions of LGBTQ+ relationship

violence, and this is an issue that needs to be addressed in future research. This fuller coverage

can be achieved by using fully gender-crossed designs, which acknowledge both the gender of

the victim and the gender of the perpetrator when examining the impact of stereotype priming,

such as 2 (victim gender: female, male) x 2 (perpetrator gender: female, male) designs (see

Erickson et al., 2017).

Findings from Study 1 indicate that incongruent stereotype information did not

significantly influence implicit attitudes toward IPV victimisation, and equivalence tests allowed

us to statistically reject effects larger than our SESOI (see Lakens, 2017; Lakens et al., in press).

However, equivalence tests also indicated that the data are inconclusive when examining the

impact of stereotype priming on implicit attitudes toward IPV perpetration in Study 2.

Furthermore, the data investigating the impact of these primes on self-efficacy and subjective

norms (Study 1 & 2) and outcome expectancies (Study 1) were inconclusive. These tests

indicated that the confidence intervals around the observed effect sizes were wide, and therefore

we recommend future studies with larger sample sizes to reliably examine the effect of

stereotype-incongruent information on implicit attitudes and explicit socio-cognitive IPV

attitudes.

Given the unbalanced gender ratio within Study 1, and small sample of men recruited, we

were unable to explore whether participants' own gender had an impact on attitudes toward IPV

victimisation due to concerns of statistical power. Exploratory analyses indicate that there were

no significant differences between male and female participants when examining subjective

norms, self-efficacy, behavioural intentions, outcome expectancies, or for benevolent or hostile

sexism. Such findings allay concerns that there may have been uncovered gender differences in

explicit attitudes, particularly in Study 1, which were not addressed. Implicit attitudes, however,

did significantly differ between genders, with male participants more strongly endorsing that

men are "strong" and women are "weak" compared to female participants. Such exploratory

analyses were replicated within Study 2, which had a more gender balanced sample. As such, we

recommended that future research aims to recruit a more gender-balanced sample when

investigating issues pertaining to gendered IPV.  Similarly, future research efforts should

examine explicit and implicit attitudes toward IPV beyond Western cultures. Indeed, research

reveals cultural variations in IPV rates and attitudes toward it; where there is gender equality in

terms of societal power in a culture, there is likely to be more parity in IPV perpetration and

more reported aggression perpetrated by women (Archer, 2006).

An additional limitation includes the potential issue of order effects within the current

study. Specifically, participants completed the male IPV vignette scenarios first followed by the

female, which may have influenced their responding on this measure. It is possible that women's

perpetration and men's victimisation would have been viewed differently if not being preceded

by a comparator condition. Further to this, it is worth acknowledging that we did not

operationalise baseline measures for implicit and explicit attitudes. As such, it is not possible to

fully establish whether there was an equal distribution of attitudes across conditions before the

experimental priming.

Finally, it is worth noting that we focused exclusively on physical forms of IPV, which

represents only one form of aggression that may occur between intimate partners. Previous

commentaries highlight issues in measuring behavioural control (Armitage & Conner, 2001),

suggesting that individual's perceptions of control are unlikely to be representative of actual

control in any given situation, due to the prevalence of illusions of control (Langer, 1975; Lerner,

1977). However, given evidence that women are often more coercive and controlling than men

(Bates et al., 2014), developing more reliable ways of assessing behavioural control within

intimate partner relationships would be a fruitful avenue for future research.

**Practice Implications**

Participants identified the behaviour within both vignettes as IPV, and indeed rated it as

unacceptable for both. However, they were significantly more likely to do so when the victim

was a woman and the perpetrator, a man. This finding is contrary to some assertions that IPV is

seen as acceptable within society and that violence against women is tolerated (Dobash &

Dobash, 1979). In contrast, our findings indicate that female victims are more likely to receive

behavioural intervention and there is a perception of greater outcomes for them, in comparison to

men.  This pattern provides an indication that prevention campaigns about violence against women has been successful in raising awareness of IPV and ensuring people intervene to protect women; however. the same cannot be said for male victims.

There are significant barriers that exist to men's help-seeking, and many issues prevent men from reporting their IPV experiences—for example, fear of not being believed, fear of being laughed at, and fear of false counter-allegations (Bates, 2017). Indeed, in a system where provision is often more oriented toward working with women as victims, men have reported frustrations with trying to access support, as well as experiences of being treated as perpetrators (Hines, Brown, & Dunning, 2007). If a man reports his experience to services such as the police and either is not believed or does not have his case taken seriously, the psychological impact can be significant. Research shows that experiences such as these perpetuate victimisation and lead to further trauma through the criminal justice system (McCarrick, Davis-McCabe, & Hirst-Winthrop, 2016). Men's perceptions of these attitudes around IPV in their friends/family, as well as within service provision, is likely to impact on their decision-making around help-seeking.

Furthermore, our results indicated no significant impact of the incongruent prime on socio-cognitive measures such as behavioural intentions. This finding means that presenting people with information about IPV rates being similar is not likely to be enough to challenge people's perceptions of their intended behaviours. This conclusion is concerning because these embedded gender norms and societal perceptions affect men's perceptions of their victimisation in a way that stops them from seeking help. Such societal perceptions therefore need to be addressed at a deeper level before campaigns that raise awareness can be effective; this could be achieved through early educational awareness which aims to discourage these traditional gender stereotypes.

**Conclusion**

In the first known of its kind, the current research established attitudinal outcomes associated with male IPV victimisation and female perpetration, therein extending existing debates on how gendered perceptions of IPV may present different situational effects upon beliefs. It seems, however, that stereotypical gendered perceptions hold true across victimisation and perpetration contexts and that presenting counter-stereotypes (incongruent priming) does not significantly reduce stereotypical conceptions. Such stereotypes are concerning because they fail to recognise that men can also be victims of heterosexual IPV. Our findings contribute new evidence on implicit gender stereotypes in respect to IPV victimisation and perpetration that is novel in this area of research. Specifically, we found that implicit attitudes toward IPV are stable across situational conditions (victimisation and perpetration) and do not appear to be influenced by priming interventions. Further there are clear explicit perceptions about greater acceptability and less identification of male victimisation and female perpetration, highlighting a greatly worrying societal norm. Our findings suggest that more needs to be done to counter gender stereotypes associated with IPV and, importantly, move beyond the notion of IPV as a gendered phenomenon. With recent research indicating that women can be as aggressive as men in relationships (Bates et al., 2017), there is a need for policy to reflect men's increasing needs as victims. Current practice in victim support is focused almost entirely on women, but this leaves a substantial number of men without help or support.

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Table 1

*Descriptive Statistics by Stereotype Condition and Gender of the IPV Victim, Study 1*

| Measure | IPV Victim | Stereotype Condition | | | Gender Main Effect |
| | | Stereotype Congruent *M* (*SD*) | Stereotype Incongruent *M* (*SD* | Control *M* (*SD* | *M* (*SD)* |
| --- | --- | --- | --- | --- | --- |
| IAT score | -- | .17 (.27) | .20 (.33) | .20 (.39) | .19 (.33) |
| Subjective Norms | Male | 3.00 (.82) | 2.73 (.80) | 3.26 (.93) | 3.00 (.88)a |
| | Female | 4.08 (.68) | 4.06 (.62) | 4.14 (.90) | 4.09 (.74)b |
| Self-efficacy | Male | 3.34 (.85) | 2.92 (1.03) | 3.38 (1.01) | 3.22 (.98)a |
| | Female | 3.73 (.82) | 3.71 (1.06) | 3.95 (.89) | 3.80 (.92)b |
| Behavioural Intentions | Male | 3.59 (.85) | 3.47 (1.00) | 3.59 (.97) | 3.55 (.94)a |
| | Female | 3.96 (.65) | 3.89 (.93) | 3.97 (.97) | 3.94 (.86-)b |
| Outcome Expectancies | Male | 2.98 (1.14) | 2.42 (1.01) | 2.85 (1.27) | 2.75 (1.16)a |
| | Female | 3.76 (.73)a | 3.90 (.95) | 3.73 (1.04) | 3.80 (.92)b |

*Note.* Different subscripts comparing male and female victims within each measure indicate that all gender main effects were significant (Bonferroni corrected *p*s < .0125).
[a]significant interaction, $F(2, 119) = 3.10$, $p = .049$, $\eta_p^2 = .05$.

Table 2

*Correlations Between Implicit Attitudes, Socio-cognitive Variables, and Hostile and Benevolent Sexism, Study 1*

| Variables | Correlations | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. | 9. |
| 1. IAT Score | -- | -.07 | .03 | -.02 | -.14 | .05 | .18* | .00 | -.00 |
| 2. Subjective Norms | -.08 | -- | .38*** | .47*** | .42*** | .10 | -.09 | -.03 | -.10 |
| 3. Self-efficacy | -.03 | .34*** | -- | .61*** | .31** | -.16 | -.19* | .03 | -.00 |
| 4. Behavioural Intentions | .04 | .46*** | .50*** | -- | .32*** | -.22* | -.20* | .03 | -.13 |
| 5. Outcome Expectancies | .06 | .35*** | .19* | .32*** | -- | .15 | .06 | -.02 | .03 |
| 6. Benevolent Sexism | .05 | .13 | -.02 | -.10 | .03 | -- | .38*** | -.16 | .16 |
| 7. Hostile Sexism | .18* | .03 | -.17 | -.12 | .04 | .38*** | -- | -.10 | .13 |
| 8. Identification of IPV | -.10 | .10 | .06 | .03 | .05 | -.11 | -.06 | -- | -.31** |
| 9. Acceptability of behaviour | -.03 | -.15 | -.19* | -.15 | .04 | .07 | .16 | -.35*** | -- |

*Note*. Correlations above the diagonal are for the vignette with a male victim; below the diagonal, for the vignette with a female victim. IAT = Implicit Association Test; IPV = Intimate Partner Violence

*p* < .05. ***p* < .01. ***p* < .001.

Table 3

*Descriptive Statistics by Stereotype Condition and Gender of the IPV Perpetrator, Study 2*

| Measure | IPV Perpetrator | Stereotype Condition | | | Gender Main Effect |
|---|---|---|---|---|---|
| | | Stereotype Congruent *M (SD)* | Stereotype Incongruent *M (SD)* | Control *M (SD)* | *M (SD)* |
| IAT Score | -- | .16 (.28) | .26 (.27) | .11 (.39) | .18 (.32) |
| Subjective Norms | Male | 3.98 (.87) | 3.84 (.88) | 3.64 (1.03) | 3.83 (.93)$_a$ |
| | Female | 2.75 (1.21) | 3.02 (1.01) | 2.67 (.97) | 2.82 (1.07)$_b$ |
| Self-efficacy | Male | 3.47 (1.07) | 3.53 (1.02) | 3.25 (1.19) | 3.42 (1.09)$_a$ |
| | Female | 3.06 (1.16) | 3.25 (1.05) | 2.97 (1.08) | 3.10 (1.09)$_b$ |
| Behavioural Intentions | Male | 4.15 (.63) | 3.94 (.91) | 3.84 (1.02) | 3.98 (.87)$_a$ |
| | Female | 3.43 (.99) | 3.34 (1.20) | 3.14 (1.14) | 3.31 (1.11)$_b$ |
| Outcome Expectancies | Male | 3.71 (.99) | 3.33 (1.06) | 3.17 (1.05) | 3.41 (1.05)$_a$ |
| | Female | 2.59 (1.16) | 2.66 (1.35) | 2.56 (1.01) | 2.60 (1.18)$_b$ |

*Note.* Different subscripts comparing male and female perpetrators within each measure

indicate that all gender main effects were significant (Bonferroni corrected $p$s < .0125).

Table 4

*Correlations Between Implicit Attitudes, Socio-cognitive Variables, and Hostile and Benevolent Sexism, Study 2*

| Variables | Correlations | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. | 9. |
| 1. IAT Score | -- | .01 | -.09 | -.17 | -.08 | .09 | .12 | .08 | .08 |
| 2. Subjective Norms | .01 | -- | .59*** | .56*** | .33** | .16 | -.15 | .04 | -.02 |
| 3. Self-efficacy | -.02 | .52*** | -- | .69*** | .41*** | .01 | -.16 | .16 | -.07 |
| 4. Behavioural Intentions | -.11 | .59*** | .68*** | -- | .36*** | -.00 | -.20* | .18 | -.25* |
| 5. Outcome Expectancies | -.06 | .55*** | .36*** | .40*** | -- | .01 | -.10 | .07 | -.07 |
| 6. Benevolent Sexism | .09 | .07 | -.11 | -.15 | -.03 | -- | .40*** | .07 | -.07 |
| 7. Hostile Sexism | .12 | -.08 | -.12 | -.34** | -.12 | .40*** | -- | -.03 | .07 |
| 8. Identification of IPV | .11 | .40*** | .45*** | .40*** | .24* | -.22* | -.14 | -- | -.26** |
| 9. Acceptability of behaviour | -.17 | -.22* | -.28** | -.36*** | -.23* | .17 | .18 | -.50*** | -- |

*Note*. Correlations above the diagonal are for the vignette with a male victim; below the diagonal, for the vignette with a female victim. IAT = Implicit Association Test; IPV = Intimate Partner Violence

*p < .05. **p < .01. ***p < .001.

## File 1. Equivalence testing.

We assessed non-significant effects using equivalence tests (see Lakens, 2017; Lakens, Scheel, & Isager, *in press*; for theory; McCarthy et al., 2018 for working example). Here we specified a moderate effect size (Cohen's $d$ = .50, Cohen, 1992) as our smallest effect size of interest (SESOI), in line with prior studies showing that counter-stereotypic exemplars reduce implicit associations (Lai et al., 2014). We then applied the two-one sided tests (TOST) procedure to statistically reject effects smaller than the lower equivalence bound ($\Delta L$ = - .50), and larger than the upper equivalence ($\Delta U$ = + .50). A significant TOST result indicates that the comparison was statistically within the equivalence bounds and we did not detect our SOSOI. Conversely, a non-significant equivalence test indicates that the data are inconclusive. In Study 1, when assessing the interaction between stereotype condition and vignette, we conducted equivalence tests only on the male victim vignette because we aimed to examine the impact that an incongruent prime would have on reporting of male victimisation relative to a congruent or control prime. In Study 2, we conducted these tests on only the female perpetrator vignette, because we examined whether an incongruent stereotype prime would impact reporting of female perpetration relative to a congruent or control prime.

Study 1: Victimisation

### *Implicit Attitudes*

A one-way between-subjects ANOVA revealed no significant main effect of stereotype condition on implicit attitudes toward IPV, $F(2, 119)$ = .09, $p$ = .915, $\eta_p^2$ = .001. The observed effect size ($d$ = -0.09, 90% LCI = - .15, UCI = .09) between the congruent stereotype prime ($M$ = .17, $SD$ = .27, $n$ = 40) and control condition ($M$ = .20, $SD$ = .39, $n$ = 43) was significantly within the equivalent bounds of $d$ = -0.5 and $d$ = 0.5, (or in raw scores: -0.17 and 0.17), $t(81)$ = 1.87, $p$ = 0.032.

The observed effect size ($d$ = 0, 90% LCI = -.13, UCI = .13) between the incongruent stereotype prime ($M$ = .20, $SD$ = .33, $n$ = 39) and the control condition ($M$ = .20, $SD$ = .39, $n$ = 43) was significantly within the equivalent bounds of $d$ = -0.5 and $d$ = 0.5, (or in raw scores: -0.18 and 0.18), $t(80)$ = -2.26, $p$ = 0.013.

The observed effect size ($d$ = -0.10, 90% LCI = -.14, UCI = .08) between the congruent ($M$ = .17, $SD$ = .27, $n$ = 40) and incongruent stereotype prime ($M$ = .20, $SD$ = .33, $n$ = 39) was significantly within the equivalent bounds of $d$ = -0.5 and $d$ = 0.5, (or in raw scores: -0.15 and 0.15), $t(77)$ = 1.78, $p$ = 0.04.

In summary, the effect size for the influence of stereotype priming on implicit attitudes was statistically equivalent for all condition comparisons, and thus the effect sizes observed were smaller than our SESOI.

### *Socio-cognitive Outcomes*

A series of 3 (Stereotype Condition: Stereotype Congruent, Incongruent, Control) x 2 (Vignette Condition; Female, Male) ANOVAs were conducted to explore the impact of stereotype condition and gendered vignette condition on subjective norms, self-efficacy, behavioural intentions and outcome expectancies.

### *Subjective Norms*

The observed effect size ($d$ = -0.61, 90% LCI = -.85, UCI = -.21) between the incongruent stereotype prime ($M$ = 2.73, $SD$ = .80) and the control prime ($M$ = 3.26, $SD$ = .93) for the male vignette was not significantly within the equivalent bounds of $d$ = -0.5 and $d$ = 0.5, (or in raw scores: -0.44 and 0.44), $t$(80) = -0.49, $p$ = 0.688.

The observed effect size ($d$ = -0.3, 90% LCI = -.58, UCI = .06) between the congruent ($M$ = 3.00, $SD$ = .82) and control condition ($M$ = 3.26, $SD$ = .93) for the male vignette was not significantly within the equivalent bounds of $d$ = -0.5 and $d$ = 0.5, (or in raw scores: -0.44 and 0.44), $t$(81) = 0.93, $p$ = 0.178.

The observed effect size ($d$ = -0.33, 90% LCI = -.57, UCI = .03) between the incongruent ($M$ = 2.73, $SD$ = .80) and congruent stereotype prime condition ($M$ = 3.00, $SD$ = .82) for the male vignette was not significantly within the equivalent bounds of $d$ = -0.5 and $d$ = 0.5, (or in raw scores: -0.41 and 0.41), $t$(77) = 0.74, $p$ = 0.23.

In summary, the data examining the influence of stereotype primes on subjective norms are inconclusive and future studies are recommended.

### *Self-efficacy*

The observed effect size ($d$ = -0.45, 90% LCI = -.84, UCI = -.08) between the incongruent stereotype prime ($M$ = 2.92, $SD$ = 1.03) and control condition ($M$ = 3.38, $SD$ = 1.01) for the male vignette was not significantly within the equivalent bounds of $d$ = -0.5 and $d$ = 0.5, (or in raw scores: -0.51 and 0.51), $t$(80) = 0.22, $p$ = 0.413.

The observed effect size ($d$ = -0.04, 90% LCI = -.38, UCI = .30) between the congruent stereotype prime ($M$ = 3.34, $SD$ = .85) and the control condition ($M$ = 3.38, $SD$ = 1.01) for the male vignette was significantly within the equivalent bounds of $d$ = -0.5 and $d$ = 0.5, (or in raw scores: -0.47 and 0.47), $t$(81) = 2.08, $p$ = 0.02.

The observed effect size ($d$ = -0.45, 90% LCI = -.77, UCI = -.07) between the incongruent ($M$ = 2.92, $SD$ = 1.03) and the congruent stereotype prime condition ($M$ = 3.34, $SD$ = .85) for the male vignette was not significantly within the equivalent bounds of $d$ = -0.5 and $d$ = 0.5, (or in raw scores: -0.47 and 0.47), $t$(77) = 0.24, $p$ = 0.404.

In summary, the data examining the influence of stereotype primes on self-efficacy is inconclusive.

### *Behavioural Intentions*

The observed effect size ($d$ = -0.12, 90% LCI = -.49, UCI = .25) between the incongruent stereotype prime ($M$ = 3.47, $SD$ = 1.00) and control condition ($M$ = 3.59, $SD$ = .97) for the male

vignette was significantly within the equivalent bounds of $d = -0.5$ and $d = 0.5$, (or in raw scores: -0.49 and 0.49), $t(80) = 1.71$, $p = 0.046$.

The observed effect size ($d = 0.0$, 90% LCI = -.34, UCI = .34) between the congruent stereotype prime ($M = 3.59$, $SD = .85$) and the control condition ($M = 3.59$, $SD = .97$) for the male vignette was significantly within the equivalent bounds of $d = -0.5$ and $d = 0.5$, (or in raw scores: -0.46 and 0.46), $t(81) = -2.28$, $p = 0.013$.

The observed effect size ($d = -0.13$, 90% LCI = -.47, UCI = .23) between the incongruent ($M = 3.47$, $SD = 1.00$) and congruent stereotype prime condition ($M = 3.59$, $SD = .85$) for the male vignette was not significantly within the equivalent bounds of $d = -0.5$ and $d = 0.5$, (or in raw scores: -0.46 and 0.46), $t(77) = 1.65$, $p = 0.052$.

The observed effect size between the incongruent and control condition was significantly within the equivalence bounds; however, the effect size between the incongruent and congruent condition was not significantly within these equivalence bounds. Overall, this suggests that stereotype incongruent information may not increase behavioural intentions to report an act of IPV against a male victimisation compared to stereotype congruent information.

### Outcome Expectancies

The observed effect size ($d = -0.37$, 90% LCI = -.85, UCI = -.01) between the incongruent stereotype prime ($M = 2.42$, SD = 1.01) and control condition ($M = 2.85$, $SD = 1.27$) for the male vignette was not significantly within the equivalent bounds of $d = -0.5$ and $d = 0.5$, (or in raw scores: -0.58 and 0.58), $t(80) = 0.58$, $p = 0.283$.

The observed effect size ($d = 0.11$, 90% LCI = -.31, UCI = .57) between the congruent stereotype prime ($M = 2.98$, $SD = 1.14$) compared to the control condition ($M = 2.85$, $SD = 1.27$) for the male vignette was significantly within the equivalent bounds of $d = -0.5$ and $d = 0.5$, (or in raw scores: -0.6 and 0.6), t $(81) = -1.79$, $p = 0.039$.

The observed effect size ($d = -0.52$, 90% LCI = .16, UCI = .96) between the congruent ($M = 2.98$, $SD = 1.14$) and incongruent stereotype prime condition ($M = 2.42$, $SD = 1.01$) for the male vignette was not significantly within the equivalent bounds of $d = -0.5$ and $d = 0.5$, (or in raw scores: -0.54 and 0.54), $t(77) = -0.09$, $p = 0.535$.

In summary, the data examining the influence of stereotype primes on outcome expectancies is inconclusive.

## Study 2: Perpetration

### Implicit Attitudes

A one-way between-subjects ANOVA revealed no significant impact of stereotype condition on implicit attitudes toward IPV perpetration, $F(2, 98) = 2.13$, $p = .124$, $\eta_p^2 = .04$. The observed effect size ($d = 0.15$, 90% LCI = -.08, UCI = .18) between the stereotype congruent prime ($M = .16$, $SD = .28$, $n = 34$) and the control condition ($M = .11$, $SD = .39$, $n = 32$) was not significantly

within the equivalent bounds of $d$ = -0.5 and d = 0.5, (or in raw scores: -0.17 and 0.17), $t$ (64) = -1.43, p = 0.079.

The observed effect size ($d$ = 0.45, 90% LCI = .01, UCI = .29) between the stereotype incongruent prime ($M$ = .26, $SD$ = .27, $n$ = 35) and the control condition ($M$ = .11, $SD$ = .39, $n$ = 32) was not significantly within the equivalent bounds of $d$ = -0.5 and $d$ = 0.5, (or in raw scores: -0.17 and 0.17), $t$ (65) = -0.2, $p$ = 0.421.

The observed effect size ($d$ = -0.36, 90% LCI = -.01, UCI = .21) between the incongruent ($M$ = .26, $SD$ = .27, $n$ = 35) and congruent stereotype prime ($M$ = .16, $SD$ = .28, $n$ = 34) was not significantly within the equivalent bounds of $d$ = -0.5 and $d$ = 0.5, (or in raw scores: -0.14 and 0.14), $t$ (67) = 0.57, p = 0.287.

In summary, the data examining the influence of stereotype primes on implicit attitudes is inconclusive.


### *Socio-cognitive Outcomes*

A series of 3 x 2 ANOVAs were conducted to explore the impact of stereotype and vignette condition (gender of perpetrator) on subjective norms, self-efficacy, behavioural intentions and outcome expectancies.

### *Subjective Norms*

The observed effect size ($d$ = 0.35, 90% LCI = -.05, UCI = .75) between the incongruent stereotype prime ($M$ = 3.02, $SD$ = 1.01) and the control condition ($M$ = 2.67, $SD$ = .97) for the female vignette was not significantly within the equivalent bounds of $d$ = -0.5 and $d$ = 0.5, (or in raw scores: -0.5 and 0.5), $t$ (65) = -0.6, $p$ = 0.275.

The observed effect size ($d$ = 0.07, 90% LCI = -.37, UCI = .53) between the congruent stereotype prime ($M$ = 2.75, $SD$ = 1.21) and control condition ($M$ = 2.67, $SD$ = .97) for the female vignette was significantly within the equivalent bounds of $d$ = -0.5 and $d$ = 0.5, (or in raw scores: -0.55 and 0.55), $t$ (64) = -1.73, $p$ = 0.044.

The observed effect size ($d$ = 0.24, 90% LCI = -. 18, UCI = .72) between the incongruent ($M$ = 3.02, $SD$ = 1.01) and congruent stereotype prime ($M$ = 2.75, $SD$ = 1.21) for the female vignette was not significantly within the equivalent bounds of $d$ = -0.5 and $d$ = 0.5, (or in raw scores: -0.56 and 0.56), $t$ (67) = -1.07, $p$ = 0.144.


### *Self-efficacy*

The observed effect size ($d$ = 0.26, 90% LCI = -.16, UCI = .72) between the incongruent stereotype prime ($M$ = 3.25, $SD$ = 1.05) and control condition ($M$ = 2.97, $SD$ = 1.08) for the female vignette was not significantly within the equivalent bounds of $d$ = -0.5 and $d$ = 0.5, (or in raw scores: -0.53 and 0.53), $t$ (65) = -0.97, $p$ = 0.168.

The observed effect size ($d$ = 0.08, 90% LCI = -.37, UCI = .55) between the congruent stereotype prime ($M$ = 3.06, $SD$ = 1.16) and control condition ($M$ = 2.97, $SD$ = 1.08) for the

female vignette was significantly within the equivalent bounds of $d = -0.5$ and $d = 0.5$, (or in raw scores: -0.56 and 0.56), $t(64) = -1.7$, $p = 0.047$

The observed effect size ($d = 0.17$, 90% LCI = .26, UCI = .64) between the incongruent ($M = 3.25$, $SD = 1.05$) and congruent stereotype prime ($M = 3.06$, $SD = 1.16$) for the female vignette was not significantly within the equivalent bounds of $d = -0.5$ and $d = 0.5$, (or in raw scores: -0.55 and 0.55), $t(67) = -1.36$, $p = 0.089$.

### *Behavioural Intentions*

The observed effect size ($d = 0.17$, 90% LCI = -.15, UCI = .73) between the incongruent stereotype prime ($M = 3.34$, $SD = 1.20$) and the control condition ($M = 3.14$, $SD = 1.14$) for the female vignette was not significantly within the equivalent bounds of $d = -0.5$ and $d = 0.5$, (or in raw scores: -0.59 and 0.59), $t(65) = -1.35$, $p = 0.091$.

The observed effect size ($d = 0.27$, 90% LCI = -.15, UCI = .73) between the stereotype congruent prime ($M = 3.43$, $SD = .99$) and the control condition ($M = 3.14$, $SD = 1.14$) for the female vignette was not significantly within the equivalent bounds of $d = -0.5$ and $d = 0.5$, (or in raw scores: -0.53 and 0.53), $t(64) = -0.92$, $p = 0.179$.

The observed effect size ($d = $ zero, 90% LCI = -.45, UCI = .43) between the congruent ($M = 3.43$, $SD = .99$) and incongruent stereotype prime ($M = 3.34$, $SD = 1.20$) for the female vignette was significantly within the equivalent bounds of $d = -0.5$ and $d = 0.5$, (or in raw scores: -0.55 and 0.55), $t(65) = -2.04$, $p = 0.022$.

The observed effect between the stereotype incongruent and control condition was not significantly within the specified equivalence bounds; however, the effect between the congruent and incongruent condition were significantly equivalent. As such, stereotype incongruent information regarding IPV perpetration did not appear to enhance behavioural intentions to report a female perpetrator of IPV compared to stereotype congruent information.

### *Outcome Expectancies*

The observed effect size ($d = 0.1$, 90% LCI = -.36, UCI = .60) between the stereotype incongruent prime ($M = 2.66$, $SD = 1.35$) and the control condition ($M = 2.56$, $SD = 1.01$) for the female vignette was not significantly within the equivalent bounds of $d = -0.5$ and $d = 0.5$, (or in raw scores: -0.6 and 0.6), $t(65) = -1.64$, $p = 0.053$.

The observed effect size ($d = 0.05$, 90% LCI = -.40, UCI = .50) between the stereotype congruent ($M = 2.59$, $SD = 1.16$) and the control condition ($M = 2.56$, $SD = 1.01$) for the female vignette was significantly within the equivalent bounds of $d = -0.5$ and $d = 0.5$, (or in raw scores: -0.54 and 0.54), $t(64) = -1.84$, $p = 0.035$.

The observed effect size ($d = 0.06$, 90% LCI = -.58, UCI = .44) between the congruent ($M = 2.59$, $SD = 1.16$) and incongruent stereotype prime condition (M = 2.66, SD = 1.35) for the female vignette was significantly within the equivalent bounds of $d = -0.5$ and $d = 0.5$, (or in raw scores: -0.63 and 0.63), $t(67) = -1.85$, $p = 0.035$.

The observed effect between the stereotype incongruent and control condition was not significantly within the specified equivalence bounds; however, the effect between the congruent and incongruent condition were significantly equivalent. This suggests that stereotype incongruent information regarding IPV perpetration did not appear to enhance perceived outcomes that reporting a female perpetrator of IPV would result in a desired outcome, compared to congruent information.

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