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The normalization of inter-sibling violence: Does gender and personal experience of violence influence perceptions of physical assault against siblings?

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Review

The Normalization of Inter-Sibling Violence

Abstract

Despite its pervasive and detrimental nature, inter-sibling violence (ISV) remains marginalized as a harmless and inconsequential form of familial aggression. The present study investigates the extent to which perceptions of ISV differ from those of other types of interpersonal violence. A total of 605 respondents (197 males, 408 females) read one of four hypothetical physical assault scenarios which varied according to perpetrator-victim relationship type (i.e., sibling vs. dating partner vs. peer vs. stranger) before completing a series of 23 attribution items. Respondents also reported on their own experiences of interpersonal violence during childhood. Exploratory factor analysis reduced 23 attribution items to three internally reliable factors reflecting perceived assault severity, victim culpability and victim resistance ratings. A 4 x 2 MANCOVA - controlling for respondent age - revealed several significant effects. Overall, males deemed the assault less severe and the victim more culpable than did females. In addition, the inter-sibling assault was deemed less severe compared to assault on either a dating partner or a stranger, with the victim of ISV rated just as culpable as the victim of dating, peer or stranger perpetrated violence. Finally, respondents with more (frequent) experiences of childhood ISV victimization perceived the hypothetical ISV assault as being less severe, and victim more culpable, than respondents with no ISV victimization. Results are discussed in the context of ISV normalization. Methodological limitations and applications for current findings are also outlined.

Keywords: SIBLING; FAMILY; VIOLENCE; VICTIM; PERPETRATOR; GENDER; NORMALIZATION

The Normalization of Inter-Sibling Violence

The normalization of inter-sibling violence: Does gender and personal experience of violence influence perceptions of physical assault against siblings?

Despite generalised intolerance of abuse, there still appears to be a hierarchy of acceptance for different types of family violence. At present, inter-sibling violence (ISV) is often minimized despite compelling evidence for its detrimental impact on victims (Button & Gealt, 2010; Caspi, 2012; Wiehe, 1997).

The prevalence of inter-sibling violence

High prevalence rates exist for varying types and degrees of physical violence committed against siblings. For instance, Mackey, Fromuth, and Kelly (2010) found 82% of people reported minor acts of ISV committed against them whereas Reese-Weber (2008) found 54% had experienced ISV that resulted in physical injury. ISV is neither gender-specific (Krienert & Walsh, 2011), culturally-bound (Rapoza, Cook, Zaveri, & Malley-Morrison, 2010) or age-specific; its occurrence is reported amongst pre-schoolers (e.g., Friedrich, Becker, Rothschild, & Banaschak, 2012), school children (e.g., Duncan, 1999) as well as both college (e.g., Goodwin & Roscoe, 1990) and university students (e.g., Relva, Fernandes, & Mota, 2013). ISV is especially prevalent amongst 'at risk' populations such as children in foster care (Pinel-Jacquemin, Cheron, Favart, Dayan, & Scelles, 2012) and young offender institutions (Khan & Cooke, 2008; 2013).

Research also links ISV perpetration with other types of interpersonal violence such as co-occurring and reciprocated mother-daughters violence (Hendy, Burns, Can, & Scherer, 2011), spousal/ dating violence (e.g., Noland, Liller, McDermott, Coulter, & Seraphine, 2004; Rothman, Johnson, Azrael, Hall, & Weinberg, 2010) and peer bullying (e.g., Duncan, 1999).

Furthermore, ISV has detrimental psycho-behavioural consequences for victims. These include a preponderance for delinquency and antisocial behaviour (Duncan, 1999), substance

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and alcohol misuse (Button & Gealt, 2010), low self-esteem and anxiety (Graham-Bermann, Cutler, Litzenberger, & Schwartz, 1994), depression (Stocker, Burwell, & Briggs, 2002), eating disorders (Wiehe, 1997) and trauma symptomology (Finkelhor, Turner, & Ormrod, 2006). As a result of this, it is easy to see why ISV is becoming recognized as the most prevalent, and potentially the most harmful, form of inter-familial violence.

The normalization of inter-sibling violence

Despite these trends, ISV is widely tolerated and commonly thought to be symptomatic of most, if not all, sibling relationships (Caspi, 2012). This normalization - hence minimization - of ISV may result from its pervasiveness and/or the misperception that physical conflict-resolution is, for children at least, character building (Dunn & Kendrick, 1982). Consequently, parents are not always motivated to intervene when ISV occurs. Such parental inaction is likely to vicariously reinforce its personal, familial and social acceptability (Hoffman & Edwards, 2004; Kiselica & Morrill-Richards, 2007). Similarly, the language often used to describe ISV (e.g., as 'rivalry' and 'horseplay') reflects further minimization of violence into minor altercations with *seemingly* little impact on victims (Phillips, Phillips, Grupp, & Trigg, 2009). As such, siblings who report ISV victimization are more likely to be blamed either for provoking their assailant and/or for not defending themselves properly (Caffaro & Conn-Caffaro, 1998). To this end, ISV is not only acceptable but also to be expected. Unsurprisingly, it tends to be normalized by family members (Caffaro & Conn-Caffaro, 2005) as well as health professionals (Omer, Schorr-Sapir, & Weinblatt, 2008) and even ISV victims themselves (Kettrey & Emery, 2006).

Impact of gender and personal experience of victimization on victim-blame

Extant violence research suggests victims are attributed at least some blame for their own assaults (Bryant & Spencer, 2003); this is one explanation for the widespread condoning of violence in intimate relationships (Simon, Anderson, Thompson, Crosby, Shelley, & Sacks,

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2001). Interestingly, victim blaming is strongly influenced by respondent (observer) gender, with females typically less approving of violence in general (Locke & Richman, 1999), more blaming of male perpetrators (Witte, Schroeder, & Lohr, 2006), and more disapproving of men who use physical violence against women (Feld & Felson, 2008). That said, some studies report no gender differences in the blaming of domestic violence victims (e.g., Beyers, Leonard, Mays, & Rosen, 2000) or female-to-male perpetrated violence (Rhatigan, Stewart, & Moore, 2011).

The extent of victim blaming might also be influenced by respondents' personal history of violence (Rhatigan et al. 2011). For example, those exposed to violence during childhood tend to be more accepting of violent behaviour (Lichter & McCloskey, 2004) and deem victims more blameworthy in adulthood than those without such exposure (Reitzel-Jaffe & Wolfe, 2001). The current study examines similar possibilities within the context of ISV.

The victim-perpetrator relationship

Differences in victim-perpetrator relationship also impact on lay perceptions of interpersonal violence, including that between siblings. Indeed, this may be a key factor in why sibling-on-sibling violence is deemed comparatively harmless (Phillips et al., 2009). In one study, Harris (1991) presented hypothetical scenarios depicting violence committed against either a sibling, friend, stranger, or spouse with, in addition, both perpetrator and victim gender varied across conditions. Both characters were described as being over 21 years of age. Overall, female respondents were more accepting of ISV and tended to judge violence committed against a friend less positively than their male counterparts. Additionally, females approved less of violence committed against a female victim (across all victim-perpetrator relationships) whereas males were equally approving of violence regardless of victim gender.

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Using a similar methodology, Hardy, Beers, Burgess, and Taylor (2010) presented four hypothetical ISV scenarios depicting either: male-on-female, female-on-male, male-on-male or female-on-female ISV. Here the perpetrator and victim were aged 12 and 9 years of age respectively. Respondents' personal experiences of ISV were also examined. Hardy and colleagues again found females to be less accepting of inter-sibling violence. Moreover, whilst females' approval of inter-sibling violence was associated with more frequent personal experiences of ISV perpetration, males' approval ratings correlated positively with their own experiences of ISV *victimisation*. The latter seems counter-intuitive.

Finally, Reese-Weber (2008) had respondents watch a short video clip in which a 15 year-old adolescent physically attacks either a sibling or dating partner. Differences across perpetrator and victim genders (cf. Hardy et al., 2010) were also examined. As expected, female respondents reported lower acceptance of both ISV and dating violence than males but this time, there was no gender difference in perceptions of dating violence being less acceptable than ISV.

Current study aims and hypotheses

To date, research examining lay perceptions of ISV is limited and somewhat fragmented (Finkelhor, Ormrod, Turner, & Hamby, 2005). With this in mind, the current study combines prevailing theories and vignettes methodologies (cf. domestic violence research) to explore attributions of blame in a hypothetical case of adult, male-to-female assault (cf. Harris, 1991) in which the victim-perpetrator relationship is experimentally manipulated to reflect assault by either the victim's brother, her dating partner, a peer (specifically, a university classmate) or a stranger. Respondent gender differences are also explored. A second aim was to investigate whether attributions towards (a depicted case of) ISV are associated with past personal experience of inter-sibling violence (cf. Hardy et al. 2010).

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Several hypotheses are advanced. First, male respondents will assign more victim blame, less perpetrator blame and perceive physical assault (regardless of type) as being less severe than will females. Second, (all) respondents will attribute more blame to the victim of ISV than to the victim of any other violence type. By extension, respondents will also ascribe less perpetrator blame and lower severity attributions to the ISV condition. These minimizing judgements should be more pronounced amongst men. Finally, respondents with a personal history of ISV victimization will attribute more blame to the (depicted) ISV victim, less blame to the ISV perpetrator, and will deem the inter-sibling assault to be less severe than respondents with no such history. This too should be more pronounced in male respondents.

Method

Respondents

A total of 605 volunteers were recruited via classes and public areas within a large University in the North-West of England. Respondent were aged from 17 to 59 years ($M=22.4$ years, $SD = 6.2$ years) with the majority being female (67.6%), of Caucasian (78.0%) ethnicity and students (75.5%) with around a fifth of having at least an undergraduate degree (19.2%). Just under half the sample were single (45.6%), with a third dating (34.2%) and the remainder either married (6.8%), co-habiting (10.9%), divorced (2.0%) or widowed (0.5%). No other demographic measures were taken.

Design

The study employed a 4 victim-perpetrator relationship type (dating vs. sibling vs. peer vs. stranger) x 2 respondent gender (male vs. female) between-subjects design. Dependent variables were three factors derived from 24 items assessing attributions of victim blame, perpetrator blame and perceived assault severity. Respondents were randomly allocated to one of the four scenario conditions.

Materials

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Questionnaire booklets were created for current purposes and comprised a brief, a hypothetical assault scenario, an attributions questionnaire, an experience of interpersonal violence questionnaire, a standard demographics questionnaire and a detachable debrief.

Scenarios: Scenarios were approximately 240 words long and outlined a hypothetical case in which a 21 year old, female university student ('Karen') was physically assaulted by a 20 year old male perpetrator ('David') whilst alone at a mutual friend's house. The assault took place in the lounge (after the host had left to answer the telephone) following a dispute over which TV channel to watch and started with the (female) victim grabbing the TV remote control unit from a coffee table and the (male) perpetrator grabbing it back. This led to a physical assault in which the victim was slapped with the remote control, pushed onto the floor and forcibly held down on the floor by the perpetrator using his feet. By the time the host re-entered the lounge the two protagonists had returned to sitting on the sofa and watching TV albeit with the victim upset with, and refusing to speak to, the perpetrator with the host described as being oblivious to the earlier conflict. Four versions described the perpetrator as being either the victim's brother, boyfriend, peer (i.e. university classmate) or stranger (i.e. another house guest who the victim had never met until the start of that evening). The names, ages and genders of all characters were deemed appropriate for current purposes. All other text remained constant¹.

Attributions: Each scenario was followed by 23 attribution items assessing perceptions of victim blame (e.g., 'What happened in front of the TV was Karen's fault'), perpetrator blame (e.g., 'David is to blame for Karen's refusal to speak to him'), assault severity (e.g., 'Karen's life will be negatively affected by what happened with David') and assault spontaneity (e.g. 'David acted spontaneously in response to Karen's behaviour'). Victim blame and assault severity items were adapted from previous research on child sexual assault attributions (e.g.,

¹ Copies of each scenario can be obtained from the first author (RK).

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Rogers & Davies, 2007) with the remainder generated for current purposes. All items were rated on a 7-point Likert scale from 1 'strongly disagree' to 7 'strongly agree'.

Personal Experiences of Interpersonal Violence Questionnaire: The PEIVQ included four items assessing the number of times respondents had been subjected to interpersonal violence (defined as being pushed, slapped, hit, punched, beaten, or in some other way physically hurt by others) at the hands of various different people, namely their boyfriend/girlfriend, sibling(s), a similarly-aged peer, a similarly-aged stranger, a parental figure, another elder or some 'other' person. A worked example was included at the start of the PEIVQ.

Procedure

Questionnaire packs were distributed at the start of lectures, or within public areas of the main university campus. Completed questionnaires were returned via a secure box (located at the front of the lecture hall) else via the university's internal post system. No incentives were offered for participation with respondents encouraged to work as honestly as possible without conferring. All aspects of the study complied with institutional and BPS ethical guidelines.

Results

All attribution items were (re)coded so that high scores represented a pro-victim/anti-perpetrator/more serious stance.

Principal Components Analysis on Attribution Items

Principal components analysis (PCA) with varimax rotation was then performed on the 23 (re)coded DVs. This extracted five factors which together explained 56.5% of total attribution variance (see Table 1).

*** Table 1 here ***

As Table 1 shows, eight items relating to event seriousness, event consequences, victim traumatisation and the need for police action loaded onto Factor 1. This factor had a very high internal reliability ($\alpha = .90$) and so was named 'assault severity'. A further six

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3 items², relating primarily to victim fault, responsibility, blame and appropriateness of
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5 behaviour loaded on to Factor 2, which had good internal reliability ($\alpha = .81$) and thus
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7 was named 'victim culpability'. Similarly, four items reflecting assault planning, whether the
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9 victim should be charged for assault and perpetrator innocence loaded on to Factor 3. Factor
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11 3 had very poor internal reliability ($\alpha = .25$) which could not be improved to a
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13 satisfactory level through item deletion. Factor 3, tentatively named 'incident planning', was
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15 therefore dropped. Two items, both relating to the victim's need to resist her assailant, loaded
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17 on to Factor 4 and had a moderate, but nonetheless acceptable, level of internal reliability
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19 ($\alpha = .60$). This factor was subsequently named 'victim resistance'. Finally, three items
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21 associated with intended versus spontaneous behaviours loaded on to Factor 5 and was
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23 tentatively named 'spontaneous reactivity'. However, Factor 5 had very low reliability
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25 ($\alpha = .12$) that could not be improved through item deletion and, as such, was also dropped.
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27 The three retained factors (Factors 1, 2 and 4) were computed and subjected to further
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29 analyses.

Preliminary Factor Screening

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Boxplots revealed 14 outliers across the three retained factors (all for F2 victim culpability and F3 victim resistance). Further inspection revealed only one case displayed systematic attributional biases across more than a single factor with this case removed from the data set (final $n=604$). Whilst Kolmogorov-Smirnov tests revealed all three factors deviated from normality ($KS_{F1}=.04$; $p=.015$; $KS_{F2}=.05$; $p=.003$; $KS_{F4}=.10$; all $p's < .001$) an inspection of histograms revealed data were suitable for parametric testing. No evidence of factor multicollinearity was found (all $r's < .50$).

Factor ratings did not differ significantly across respondents' (Caucasian vs. non-Caucasian) ethnicity or their (student vs. non-student) occupational status. Nor were factors

² An additional item - namely Item 10 ('the perpetrator is to blame for the victim's refusal to speak to him') - was dropped due to its double loading on Factors 2 and 3.

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3 scores associated with respondents' general qualification level or relationship status³. In
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5 contrast, one factor - victim resistance - did correlate significantly with respondent age
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7 ($r=.11$; $p=.007$; $n=604$), with younger respondents believing the victim should have resisted
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9 more than older respondents. Future analyses will control for this age covariate.
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Multivariate Analysis of Covariance (MANCOVA).

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14 A 4 victim-perpetrator relationship type x 2 respondent gender between-subjects
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16 MANCOVA - controlling for respondent age - was performed across the three retained
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18 factors. Adjusted means and standard deviations are presented in Table 2.
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21 *** Table 2 here ***
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23 Overall, respondent age was a significant multivariate covariate, *Wilks Lambda* = .88;
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25 $F(3,593)=3.33$; $p=.019$; $\eta^2=.02$, with older respondents making more pro-victim/severe
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27 attributions than their younger counterparts. Significant multivariate main effects were also
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29 found for both victim-perpetrator relationship type, *Wilks Lambda* = .88; $F(9,1443.4)=8.42$;
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31 $p<.001$; $\eta^2=.04$, and respondent gender, *Wilks Lambda* = .98; $F(3,593.0)=4.28$; $p=.005$;
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33 $\eta^2=.02$, with (all) respondents assigning more pro-victim/severe attributions to the dating
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35 and stranger conditions, and females assigning more pro-victim/severe attributions generally
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37 across all conditions (see Table 2). No multivariate interaction effect was found.
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41 Subsequent post-hoc univariate ANCOVA revealed four significant effects. Specifically, a
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43 respondent gender effect was found for both assault severity, $F(1,595)=7.01$; $p=.008$; *partial*
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45 $\eta^2=.01$, and victim culpability, $F(1,595)=9.14$; $p=.003$; *partial* $\eta^2=.02$, ratings with males
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47 judging the incident less severe and the victim more culpable than females. Additionally, two
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49 victim-perpetrator relationship effects were found, the first being for assault severity ratings,
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51 $F(1,595)=19.65$; $p<.001$; *partial* $\eta^2=.09$. Post hoc, pairwise, comparisons across the four
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53 relationship types (with Bonferroni adjustment) confirmed that (all) respondents judged the
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57 ³ Due to small numbers both divorced ($n=12$) and widowed ($n=3$) respondents were omitted
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59 from this analysis.
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3 assault more severe if it involved (a) dating partner as opposed to a sibling ($p < .001$), (b) a
4 stranger as opposed to a sibling ($p < .001$) and (c) a stranger as opposed a peer ($p < .001$). The
5 second victim-perpetrator relationship effect was for victim culpability, $F(1,595)=5.02$;
6 $p=.002$; *partial eta*²=02. Corresponding post hoc comparisons revealing the victim was
7 deemed more culpable for her own assault if the perpetrator was either (a) a peer as opposed
8 to her dating partner ($p=.012$) or (b) a peer as opposed to a stranger ($p=.002$). In contrast, the
9 victim of ISV was rated just as culpable as the victim of dating, peer or stranger perpetrated
10 violence. No other significant (main or interaction) effects were found

Respondents' Personal Experiences of Interpersonal Violence

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As Table 3 shows, over three-quarters of the sample claimed to have experienced at least one episode of interpersonal violence against them as a child, with over half claiming victimisation by a sibling. A similar proportion claimed to have experienced parental and/or peer violence during childhood with around a fifth also reporting at least one episode of childhood violence perpetrated by a boyfriend/girlfriend or by a stranger. A tenth of the sample said they had suffered childhood violence at the hands of another (older) person.

*** Table 3 here ***

Generally, PEIVQ frequencies were similar for male and female respondents although noticeably, more females reported experiencing childhood violence perpetrated by a boyfriend/girlfriend or a peer (see Table 3). The relationship between PEIVQ ratings and attributions relating specifically to inter-sibling violence (i.e. just the depicted ISV scenario) was examined via a series of correlation analyses. These data are presented in Table 4.

*** Table 4 here ***

Attributions relating to ISV: As Table 4 shows, (all) respondents who experienced more frequent ISV in childhood judged the depicted ISV scenario to be less severe than those who reported less frequent ISV experiences. This was true for both male and female respondents

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3 separately. Most other types of personal violence experience were unrelated to assault
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5 severity attributions. That said, respondents – especially males – who reported more parent-
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7 inflicted childhood violence, rated the depicted ISV as less severe than those without these
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9 personal experiences.

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11 As predicted, respondents who experienced more ISV in their own childhoods deemed the
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13 depicted ISV victim more culpable for her own abuse than those who suffered less childhood
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15 ISV. Again, this was primarily true of males. In addition, respondents reporting more
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17 childhood experiences of boy/girlfriend, stranger or parental violence also viewed the
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19 depicted ISV victim as being more culpable. This was mainly true of female respondents with
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21 similar trends found for male survivors of peer perpetrated childhood violence. Finally,
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23 personal experiences of interpersonal violence were unrelated to attributions of ISV victim
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25 resistance. This was true for all types of violence including ISV experienced by male and
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27 female respondents.
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Discussion

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34 The present study examines the impact respondents' gender and personal experience of
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36 interpersonal violence had on their perceptions of a hypothetical scenario in which a 21 year
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38 old female victim was physically assaulted a 20 year old male who was either: her brother,
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40 her dating partner, a peer or a male stranger. Having controlled for respondent age several
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42 interesting findings emerged.
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46 First, males deemed the depicted assault to be a less serious and the victim more culpable
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48 for her own assault than did females. This was true regardless of who perpetrated the
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50 violence. These gender differences are consistent with previous trends in (lay) perceptions of
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52 ISV (Hardy et al. 2010; Harris, 1991; Reese-Weber, 2008) as well as those relating to other
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54 types of interpersonal conflict such as adult rape (Pollard, 1992), child sexual abuse (e.g.,
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Davies et al., 2009) and domestic violence (Locke & Richman, 1999) in which women are generally more supportive of victimised individuals.

Second, the nature of the victim-perpetrator relationship had a significant impact on attributions of both assault severity and victim culpability. Specifically, physical assault by the victim's brother was deemed less severe than identical assault by either her dating partner or a male stranger. This is consistent with the widespread normalization of ISV (Mackey et al., 2010; Reese-Weber, 2008). But, whilst the victim was blamed more for her own assault if perpetrated by a peer (verses either her dating partner or a stranger), the victim of ISV was deemed just as blameworthy regardless of who aggressed. This is contrary to the ISV normalization hypothesis (cf. Caffaro & Conn-Caffaro, 2005).

Third, all respondents who had personally experienced ISV victimization perceived the hypothetical ISV assault as being less severe, and victim more culpability, than respondents with no prior exposure to ISV during their childhood. Such attributions are an implied consequence of ISV normalization in the 'real world'. As predicted (cf. Hardy et al, 2010), this normalization of inter-sibling violence was more prominent in male respondents

Applied value and implications for policy

It is important to understand how ISV is perceived, not least by health, welfare, and education professionals whose role it is to identify and raise awareness of harmful behaviors. The significance of this need is highlighted by previous findings in which ISV victims are blamed not only by laypersons (e.g., students; Bryant & Spencer, 2003) but also by the police (DeJong, Burgess-Proctor, & Elis, 2008), social workers (Maynard, 1985), health care staff (Kim & Motsei, 2002) and victim support volunteers (Thapar-Björkert & Morgan, 2010). Recognizing ISV as having psychologically detrimental and potentially injurious consequences could represent the first step towards improved relevant screening and prevention schemes (Carlson & Worden, 2005). Such recognition would enable welfare

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workers to target and manage persistent offenders and aid victim recovery more effectively (Fox & Cook, 2011). Ultimately, it could reduce the widespread tolerance and subsequent normalization of ISV guiding caregivers towards the use of more constructive means of familial conflict resolution (Omer et al. 2008; Phillips et al. 2009).

Methodological Limitations

Whilst a strength of the present study is its use of a relatively large sample size, several methodological limitations are worthy of note. First, current inferences are restricted by the use of a convenience sample consisting primarily of university students. Although this hinders the ability to generalize results to a wider population, the large sample size plus partialling out for respondent age encourages confidence in our findings. Additionally, the present study focused solely on a male-to-female physical assault and thus, in the ISV condition, on a brother-to-sister violence. Due to the complex nature of sibling abuse, future studies ought to investigate female-to-male and same-sex ISV, within the context of both genetically-related and blended families.

Another criticism is that the depicted victim and perpetrator were both young adults, specifically university students in the early twenties. Whilst inter-sibling violence can occur in all life stages (e.g., Friedrich, et al., 2012; Hardy, et al., 2010) it seems likely that lay perceptions of ISV will differ according to the age of, hence age-gap between, the relevant parties. Future studies should explore this by comparing ISV between, say, child versus adolescent versus adult siblings. Finally, we encourage future studies to utilize a more encompassing measure such as a modified *Conflict Tactics Scale* (CTS: Straus, 1979) so as to gauge both the frequency *and* severity of respondents' ISV experiences. It would also be imprudent to overlook social desirability and memory biases (e.g., Wilson & Fromuth, 1997) as these are likely to influence the accurate recall of personal experiences of violence, especially those occurring in childhood.

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By its very nature, siblinghood is a precarious and complex domain, in which brothers and sisters develop psychosocially both as individuals and as members of their wider community. The uninhibited and emotionally-charged interactions which characterize sibling relationships are well documented in the developmental literature with the violent and harmful acts perpetrated by siblings increasingly noted in aggression research. It is hoped the present investigation goes some way to explaining the apparent paradox of why people routinely minimize this wide-spread and abusive form of interpersonal violence.

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Table 1: Factor Loadings, Eigenvalues & Percentage of Variance Explained by Each Factor (Final Versions)

Factors & Items	Factors				
	1	2	3	4	5
Factor 1: Assault Severity					
Eigenvalue: 6.65					
Variance Explained: 21.0%					
20. perpetrator should be charged with assault	.79				
04. victim will be traumatised	.78				
18. negative effect on victim's life	.76				
24. negative effect on victim-perpetrator relationship	.74				
16. incident not serious (r)	.72				
07. police should investigate	.72				
14. victim physically assaulted	.70				
15. perpetrator play fighting (r)	.67				
Factor 2: Victim Culpability					
Eigenvalue: 2.56					
Variance Explained: 14.3%					
23. victim fault (r)		.75			
01. victim behaviour inappropriate (r)		.70			
08. victim should not be blamed		.69			
17. victim responsible (r)		.64			
06. perpetrator responsible	.35	.64			
02. perpetrator fault		.58			
Factor 3: Incident Planning[†]					
Eigenvalue: 1.59					
Variance Explained: 8.4%					
11. victim planned incident (r)			.67		
21. victim should be charged with assault (r)			.60		
03. perpetrator planned incident			-.58		
09. perpetrator not guilty (r)	.46		.55		
Factor 4: Victim Resistance					
Eigenvalue: 1.48					
Variance Explained: 6.4%					
19. victim should have resisted more (r)				.84	
05. victim should have fought back more (r)				.79	
Factor 5: Spontaneous Reactivity[†]					
Eigenvalue: 1.21					
Variance Explained: 6.2%					
12. victim acted spontaneously					-.65
13. perpetrator did not intend what happened (r)					.63
22. perpetrator victim acted spontaneously (r)		.30			.54

Suffix (r) indicates reverse coded item; only highest loadings retained; † factor omitted from subsequent analyses

(n=591)

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Table 2: Factor ratings across victim-perpetrator relationship & respondent gender controlling for respondent gender

Factor	Resp Gender	Dating		Sibling		Peer		Stranger		All		Sig. Effect
		M	(SE)	M	(SE)	M	(SE)	M	(SE)	M	(SE)	
Assault Severity	Male	4.08	(.19)	3.22	(.18)	3.67	(.18)	4.46	(.18)	3.86	(.09)	R ***
	Female	4.29	(.12)	3.66	(.12)	3.99	(.15)	4.66	(.12)	4.15	(.06)	G **
	All	4.19	(.11)	3.44	(.11)	3.83	(.12)	4.56	(.11)	4.00	(.06)	
Victim Culpability	Male	4.82	(.16)	4.81	(.15)	4.39	(.15)	5.05	(.15)	4.77	(.08)	R **
	Female	5.25	(.10)	4.99	(.10)	4.83	(.13)	5.15	(.10)	5.05	(.05)	G **
	All	5.03	(.09)	4.90	(.09)	4.61	(.10)	5.10	(.09)	4.91	(.05)	
Victim Resistance	Male	3.91	(.20)	3.70	(.19)	3.77	(.19)	3.47	(.20)	3.71	(.10)	-- --
	Female	3.81	(.13)	3.93	(.13)	3.93	(.16)	3.81	(.13)	3.87	(.07)	
	All	3.86	(.12)	3.81	(.11)	3.85	(.13)	3.64	(.12)	3.79	(.06)	

Adjusted means. Range: 1 'strongly disagree' to 7 'strongly agree' with higher scores reflecting a more pro-victim/anti-perpetrator/ more serious stance for all factors.

Significant Victim-Perpetrator Relationship (R), Respondent Gender (G) and subsequent interaction effects found at the: * $p < .05$ ** $p < .01$ and *** $p < .001$ levels (two-tailed)

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Table 3: Respondents Reporting At Least One Experience of Interpersonal Violence During Childhood by Perpetrator Type for Male, Female & All Respondents

Perpetrator Type	Male		Female		All	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Boy/girlfriend	25	12.8	75	18.4	100	16.5
Sibling [†]	109	55.6	234	57.4	343	56.7
Peer [‡]	117	59.7	190	46.6	308	50.9
Stranger [‡]	42	21.4	78	19.1	121	20.0
Parental [†]	89	45.4	193	47.3	282	46.6
Other elder	24	12.2	42	10.3	66	10.9
Other	23	11.7	42	10.3	65	10.7
All [§]	154	78.6	325	79.7	479	79.3

[†] includes genetically-related & non-genetically related siblings/parents; [‡] peers & strangers similar to respondent age at time of violence; [§]category 'All' exceeds 100% as multiple responding permitted.

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Table 4: Correlations (Kendall's tau-b) between ISV-specific factor ratings and respondents' personal history of interpersonal violence for male, female and all respondents

Resp. Age	Resp. Gender	Perpetrator Type	Assault Severity	Victim Culpability	Victim Resist
Childhood	Males	Boy/girlfriend	-.09	-.05	.12
		Sibling	-.28 **	-.21 *	-.13
		Peer	-.16	-.22 *	-.04
		Stranger	-.03	-.17	.12
		Parental	-.24 *	-.10	-.15
		Other elder	.01	-.04	-.13
		Other	.02	-.03	-.14
	Females	Boy/girlfriend	-.02	-.21 **	.13
		Sibling	-.17 *	-.13	-.01
		Peer	.06	-.03	-.04
		Stranger	-.11	-.20 **	.02
		Parental	-.12	-.18 *	.03
		Other elder	.00	-.12	.11
		Other	.01	-.12	.11
	All	Boy/girlfriend	-.03	-.17 **	.13
		Sibling	-.21 ***	-.15 **	-.04
		Peer	-.04	-.09	-.04
		Stranger	-.10	-.20 **	.04
		Parental	-.14 *	-.15 *	-.02
		Other elder	.02	-.10	.06
		Other	.02	-.10	.06

Factor correlations for the ISV scenario only. Significant at the * $p < .05$ ** and $p < .01$ levels (two-tailed; $n_{all}=167$; $n_{male}=52$; $n_{female}=115$)