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RESEARCH ARTICLE

Intimate Partner Violence in Belgium: Prevalence, Individual Health Outcomes, and Relational Correlates

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Research on intimate partner violence (IPV) using national samples is important to guide prevention efforts. However, the latest prevalence estimates for Belgium date from more than ten years ago. Therefore, this study used population-based cross-sectional data (N = 1,472) to assess to what extent adult women and men in Belgium experienced psychological, physical or sexual violence from their current partner in the last year. Next to assessing the association with individual health correlates, we explored the association between IPV and relationship quality. The annual prevalence of physical IPV in a current relationship was 1.3%. Only women experienced sexual IPV (0.3%). Fourteen percent of the respondents reported psychological violence and no differences were noted between women and men. Victims of psychological IPV reported adverse mental health outcomes and the effect was stronger for women than for men. Additionally, psychological victimization was associated with a diminished level of relationship quality, but no gender differences were noted.

Keywords: intimate partner violence; psychological violence; mental health; relationship quality

The last decades, there has been an intensification of research on intimate partner violence (IPV) at both international as well as national levels[1]. Specifically in Belgium, two large representative population-based studies have already been conducted on IPV. The first study dates from 1988 and only analyzed violence against women (Vandewege, Bruynooghe, & Opdebeeck, 1988). The second study was extended to men (Bruynooghe, Nolanders, & Opdebeeck, 1998). As the most recent prevalence rates date from more than ten years ago, the major aim of the current study was to provide up-to-date national IPV prevalence estimates. In addition, this study further expands the knowledge on two topics that have only recently gained more research attention. These include the involvement of men as victims, which still remains a controversial research topic, and the examination of psychological IPV. Alongside registering the occurrence of IPV, we aimed to examine both the individual and relational well-being among IPV victims.

Prevalence Research on Intimate Partner Violence

The World Health Organization (WHO, 2010) refers to IPV as "behaviour within an intimate relationship that causes physical,

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sexual or psychological harm, including acts of physical aggression, sexual coercion, psychological abuse and controlling behaviours" (p.11). Paradoxical to the idea of romantic relationships, an intimate partner does not always offer love and security. A substantial percentage of people incur the risk of experiencing violent acts from their partner at least once in their lifetime (e.g., Archer, 2000; Garcia-Moreno, Jansen, Ellsberg, Heise, & Watts, 2006). However, partially due to large methodological differences between studies, the exact magnitude of the problem is difficult to grasp. For instance, prevalence rates strikingly depend on how IPV is defined (i.e., the forms of IPV included in the definition), to who the study is addressed (i.e., clinical samples vs. community samples), and on the timeframe that is used (i.e., lifetime vs. year prevalence). Therefore, methodological aspects have always to be kept in mind when interpreting IPV estimates.

Sample choice. Studies on IPV have been conducted in a variety of samples, which can be categorized as clinical samples (i.e., a risk group for IPV victimization/perpetration) or community samples (i.e., a random sample of the general population or a convenience sample based on availability). There is clear evidence that community samples generate lower prevalence rates than clinical samples, which indicates that the latter samples rather measure severe IPV victimization while community samples mainly measure mild and moderate violence (Anderson, 2005; Krahé et al., 2005). Nevertheless, even within community samples studies report great variations in prevalence estimates. For instance, the population-based study of the WHO (Krug et al., 2002) in 48 countries reported annual prevalence rates of physical IPV in women ranging from 3% to 52%. An American population-based study (Breiding, Black, & Ryan, 2008) disclosed annual prevalence rates of physical and/or sexual IPV of 1.4% in women and 0.7% in men. In 2005, Krahé and colleagues specifically discussed the prevalence of physical and/or sexual IPV in 35 studies from 21 countries outside the U.S. These scholars report estimates for women's physical IPV victimization ranging from 2.7% to 52% and from 7% to 76.9% for sexual victimization. Twelve of these studies also provided prevalence rates for male physical victimization that ranged from 4.1% to 19%. A national IPV prevalence study in France (Jaspard et al., 2002) reported annual prevalence rates for women's psychological (8%), physical (2.5%), and sexual (0.9%) victimization. Despite the aforementioned methodological variations between studies, ongoing knowledge on IPV in national samples stays very valuable to guide prevention and intervention efforts (Breiding et al., 2008).In this respect, the present study aimed to provide recent prevalence estimates of IPV in a nationally representative sample of Belgian women and men.

Gender. Although great progress has been made in terms of how to define, assess and address violence within relationships, the debate on gender and IPV is still ongoing (Afifi et al., 2009; Johnson & Ferraro, 2000; Woodin, Sotskov, & O'Leary, 2013). Some scholars refer to gender as a key factor in IPV, while others view gender as only rather one of the components of the problem (Woodin et al., 2013). When it comes to empirical research findings, mixed results are found in terms of gender (a)symmetries. Some studies report higher physical victimization rates for women, some report similar rates for women and men and some report higher physical victimization rates for men (see Krahé et al., 2005 for a detailed review). A meta-analysis on gender differences in aggression between heterosexual partners (Archer, 2000) found gender symmetry in physical IPV among community samples but found men to be mostly be the perpetrators in samples selected for severe victimization. The idea of gender (a)symmetry in the violence literature can be situated in two theoretical perspectives that have debated the etiology of IPV, namely the 'feminist perspective' and the 'family violence perspective' (Johnson,

1995; Johnson & Ferraro, 2000). The feminist perspective posits that IPV is a direct outcome of men using severe and multiple forms of violence such as terrorization and threats to control their partner (i.e., intimate terrorism). In this perspective, men are predominantly the perpetrators and women the victims of IPV (Dobash, Dobash, Wilson, & Daly, 1992). The family violence perspective refers to more moderate forms of partner violence and hypothesizes that violence is used to address conflict rather than to control the partner (i.e., common couple violence). According to this perspective, women are just as likely as men to be perpetrators or victims of IPV (Prospero, 2008a). It is assumed that community samples rather measure common couple violence, while clinical samples rather measure intimate terrorism (Johnson, 1995). Based on the fact that the current study reports on a general, representative community sample, we first hypothesized that no or small gender differences would be found in IPV prevalence rates (hypothesis 1).

Psychological IPV. Recently, there is an increasing recognition of the importance of examining psychological violence. Psychological IPV or psychological aggression is by Follingstad (2009) referred to as " the full range of potentially negative intimate interpersonal behaviors, without implying that all aggression is abusive" (p. 272). This latter aspect in the sentence is important as to date there is no consensus about this construct. Neither a universal description has been established for psychological IPV, nor a legal definition (Follingstad, 2007). Scholars differ in what to call the acts of non-physical forms of violence (McHugh, Rakowski, & Swiderski, 2013), and there is no general cut-off score to determine whether or not one is a victim of psychological intimate violence (O'Leary, 2001). In other words, psychological IPV is much more subjective, and therefore more complex to measure and to understand than physical IPV. When examining psychological violence, one must keep in mind these conceptual difficulties as they influence the results (Follingstad, 2009).

Notwithstanding these aforementioned difficulties, recent studies have noted the importance of integrating psychological aggression in IPV research as it is more prevalent, often a precursor of physical IPV, and may be more harmful than physical IPV (Follingstad, 2007; Follingstad & Edmundson, 2010; Krug et al, 2002; Péloquin, Lafontaine, & Brassard, 2011; Romans et al., 2007). Therefore, we hypothesized that in the present study psychological violence would also be more prevalent than both physical and sexual IPV (hypothesis 2)

Individual Well-Being

Experiences with IPV undermine the individual well-being of victims (e.g., Afifi et al., 2009). Surveys focusing on the health correlates of IPV victimization among both women and men have suggested that there may be substantial differences in how they experience these violent acts, despite equivalent experiences with IPV (Anderson, 2002). Indeed, a robust finding in these studies is that the health outcomes for victimized women are more adverse than for men (Anderson, 2005; Archer, 2000; Swan & Snow, 2003; Williams & Frieze, 2005). Overall, studies have shown that in the context of heterosexual domestic violence, women are much more likely than men to report physical injuries (e.g., chronic pain syndrome, cuts and bruises, stress-related symptoms; Archer, 2000; Campbell, 2000) and mental health problems (e.g., poor self-reported health, depression, anxiety, alcohol and drug abuse, feelings such as anger, guilt, shame, and personal distress; Anderson, 2005; Campbell, 2002; Ellsberg et al., 2008; Foa, Cascardi, Zoellner, & Feeny, 2000; Follingstad, 2009; Johnson & Ferraro, 2000; Zlotnick, Johnson, & Kohn, 2006; Williams & Frieze, 2005). A potential explanation for this effect is that violence directed from women to men is in general less frightening than violence directed from men to women (Swan & Snow,

2003). However, Afifi et al. (2009) found an association between a poor mental health and physical IPV for both men and women, although gender differences were noted. That is, men reported more externalizing problems (e.g., substance abuse) and women more internalizing problems (e.g., anxiety disorders) as reaction to their victimization.

Only a limited number of studies have addressed the health effects of psychological violence in intimate relationships. As already stated, no general consensus exists on how psychological violence should be defined and which acts it should contain (Follingstad, 2007). Nevertheless, evidence has been found that psychological violence has a negative health impact (Coker et al., 2007) with depressive symptoms and decreased self-esteem as the best documented health outcomes for psychological IPV (Follingstad, 2009). As research on the association between psychological IPV and health outcomes in men is scarce, it still remains unclear whether the effects of psychological IPV are equal for men and women. We presumed that – in line with the overall literature on the health outcomes of IPV experiences – exposure to IPV would be associated with a poorer mental well-being in both men and women (hypothesis 3a) and that this effect would be stronger for women (hypothesis 3b).

Relational Well-Being

Most studies on IPV have investigated the impact on the victim rather than on the quality of the relationship. Indeed, researchers (e.g., Follingstad, 2009) agree that the relationship as a system that changes due to aversive interpersonal actions has not received a lot of attention in the IPV research. The link between violence within relationships and diminished relationship quality is rather assumed than empirically investigated (Bradbury, Fincham, & Beach, 2000). It is difficult to know whether low relationship quality leads to IPV and thus functions as a "risk marker", or whether lowered quality is the result of IPV. Stith, Smith, Penn, Ward, and Tritt (2004) identified low levels of relationship quality as one of the most important risk markers for IPV, whereas the longitudinal study of Testa and Leonard (2001) found evidence for decreased relationship quality in women *following* IPV. In addition, a stronger association was found between relationship quality and IPV for female victims than for male victims (Stith et al., 2008). However, these findings are difficult to generalize because many studies of violent couples have focused on those who are in marital therapy and who thus already report more marital distress (Williams & Frieze, 2005). To counter this limitation, Williams and Frieze (2005) investigated the relationship between violent relationships and relationship quality in a national sample of women and men and similarly found that female victims of physical IPV experienced greater detriment to their relationship quality than male victims (regardless of the severity of IPV).

Studies on the link between IPV and relationship functioning have some important limitations. First, they predominantly focus on violence directed from men to women. Consequently, less is known about the link between relationship quality and IPV for victimized men (Stith et al., 2008). Furthermore, research addressing the link between relationship quality and IPV has mainly focused on physical abuse. Little is known about the perception of relationship quality in the context of psychological IPV and the existing results are mixed (Follingstad, Rogers & Duvall, 2012). For these reasons, we aimed to examine the link between IPV and relationship quality among male and female victims of IPV. In line with the representative sample of Williams and Frieze (2005), we expected to find that IPV victims would report less relationship quality (hypothesis 4a) and that this effect would be stronger for women than for men (hypothesis 4b).

Method

Participants and Procedure

This study made use of a subsample of a population-based cross-sectional survey on interpersonal violence in Belgium, entitled

'Emotional, physical and sexual abuse – the experiences of women and men' (Pieters, Italiano, Offermans, & Hellemans, 2010). This survey contained information on violence in the public sphere, family violence, intimate partner violence and sexual violence. Data were collected between April and July 2009. Our study samples were a priori stratified based on language (i.e., Dutch, French), region (i.e., Flanders, Wallonia, Brussels), gender (i.e., women and men), and age (i.e., between 18 and 75 years of age) to make them representative of the Belgian population. A sample of 5037 individuals was recruited through WDM Belgium, a marketing service provider specialized in gathering data and database management service[2]. Once the sample frame was set up, all selected individuals received a recruitment letter with a brief description of the study and an invitation to participate. The survey was presented as 'A survey of health, safety and general living conditions'. The actual interview was conducted by telephone. In order to increase the response rate each absent individual was contacted at least five times in different time periods (e.g., hours, days). Women were contacted by female interviewers and men by male ones to make sure that respondents would feel at ease with answering sensitive questions. All interviewers – master students in psychology or sociology – were carefully trained by the researchers. That is, they were given training on the quality and validity of data collection by survey, on the questionnaire and the contact procedure, and on the topic of this survey 'interpersonal violence'. Of the total sample, 613 persons were excluded because of death ($n = 4$), illness ($n = 85$), language issues ($n = 120$), age ($n = 203$), long term absence (e.g., abroad for a long period; $n = 39$), or a wrong number or relocation ($n = 162$). This resulted in 4424 eligible interviews. There were 2351 active and passive (i.e., unable to contact after five phone attempts) refusals. A full survey was completed by 2073 individuals (response rate: 47.03% of the eligible respondents). After cleaning the data for missing values, the final dataset consisted of 2014 respondents (94.5% Belgian nationality; 1211 Flemish and 803 French speakers). After data collection, the data were weighted by age. Comparisons with the adult Belgian population, provided by the Directorate-General for Statistics and Economic Information Statbel (2008), indicated no meaningful differences between the study sample and the Belgian population on the gender of the respondents (women: $49.3\%_{sample}$, $51.1\%_{population}$; men: $50.7\%_{sample}$, $48.9\%_{population}$) and region (Flanders: $60.8\%_{sample}$, $57.9\%_{population}$; Wallonia: $32.0\%_{sample}$, $32.6\%_{population}$, and Brussels: $7.3\%_{sample}$, $9.5\%_{population}$).

Because this study reports on respondents' experiences with IPV in their current relationship we used data from 1472 respondents who were in a relationship at the time of the survey (45.8% women and 54.2% men). The mean age of the women was 42.26 years ($SD = 14.41$, Range: 18–75). The mean age of the men was 47.46 years ($SD = 14.85$, Range: 18–75). More than two-thirds (68.3%) were married, 15.4% were single, 11.4% were cohabiting, 3.9% were divorced and 1.1% were widowed. Most of the respondents (76.3%) had one or more children. Among the respondents, 4.6% had no degree or a primary school degree, 45.8% had finished secondary school, 34.5% had earned a high secondary school degree, and 49.6% had earned a high school degree.

Measures

Sociodemographics. In addition to gender, age, education level, and civil status, respondents were asked about their area of residence (i.e., a big city, suburbs of a big city, small town, or a village), how often they participate in outside activities, how often they meet and talk to friends and family members (both answers ranging from 0 = *never* to 4 = *daily or almost daily*), and whether they experience the frequency of these contacts as satisfactory (0 = *yes, enough* or 1 = *no, not enough*).

Intimate partner violence. In the current study, IPV was conceptualized as self-reported physical, psychological and sexual victimization by the current partner in the

past 12 months. More specifically, respondents were asked "Thinking about your partner, would you say that over the past 12 months he/she…" followed by a number of concrete terms measuring the different indicators of IPV. In line with the national survey on violence against women in France (Jaspard et al., 2002), physical IPV was assessed by five items based on the Conflict Tactics Scale (Straus, 1979): (a) thrown something at you, shaken you or grabbed you suddenly, (b) scratched you, bitten you or pulled your hair, (c) slapped you, punched or kicked you, hit you with something that hurts, (d) threatened you with a weapon, a dangerous object, or attempted to kill you or strangle you, and (e) prevented you from entering home, locked you out or when in the car, left you by the roadside. Respondents answered whether or not (0 = *no* and 1 = *yes*) they had experienced each incident and if so, how many times in the past 12 months this happened to them (ranging from 1 = *once* to 4 = *daily or almost*). We recoded the five items such that they ranged from 0 (= *no)* to 4 (= *daily or almost daily).* A final score for physical IPV was computed by summing the scores for each item (Range: 0 – 20). The Cronbach's alpha reliability for this scale was .69.

Psychological IPV was assessed with an adapted version of the Multidimensional Measure of Emotional Abuse (MMEA; Murphy & Hoover, 2001). This original 28-item scale comprises four subscales. In the present study, we selected – in line with Jaspard et al. (2002) – five items divided over the four different subscales: (a) restrictive engulfment (e.g., "tried to limit the contact with your friends or family members"; "insisted on knowing with whom and where you are"), (b) denigration (e.g., "has sworn at you, criticized or ridiculed you for what you were doing or saying"), (c) hostile withdrawal (e.g., "has stopped talking to you, totally refused to discuss things with you") and (d) dominance / intimidation (e.g., "did something to intimidate you such as screaming, breaking objects, threatening to kill you or threatening to commit suicide"). Respondents answered whether or not (0 = *no* and 1 = *yes*) they had experienced each incident and if so, how many times in the past 12 months this had happened to them (ranging from 1 = *rarely* to 4 = *systematically*). We recoded these six items such that they ranged from 0 (= *no*) to 4 *(= systematically).* A final score for psychological IPV was computed by summing the scores for each item (Range: 0 – 20). Cronbach's alpha was .73 for this scale.

As a measure of sexual IPV, respondents were asked two questions (items modified from the national survey on violence against women in France, Jaspard et al., 2002): "Thinking about your partner, would you say that over the past 12 months he/she (a) forced you to carry out sexual acts that you found degrading or humiliating?" and (b) "forced you to undergo sexual touching, or attempted or succeeded to have sex with you against your will?" Respondents indicated if they had experienced these incidents (0 = *no* and 1 = *yes*), and if so how often they had experienced them in the past 12 months (ranging from1 = *once* to 4 = *daily or almost daily*). We recoded both items such that they ranged from 0 *(= no)* to 4 *(= daily or almost daily).* A final score for sexual IPV was computed by summing the scores for the two items (Range: 0 – 8)[3].

Individual well-being. Respondents' individual well-being was assessed with six single items. These were selected on the basis of other international population surveys on interpersonal violence (see Pieters et al., 2010 for a detailed overview of these studies). First, respondents' self-perceived general health was assessed with the question "Would you say that, overall, your health is…?" with answers ranging from 0 (= *very good*) to 4 (= *very bad*). Second, respondents' daily stress level was assessed using the question "Thinking about the level of stress in your life, would you say that most days are..?". Answers ranged from 0 (= *not at all stressful*) to 4 (= *very stressful*). Third,

sleeping problems in the past 12 months were assessed with the question "How often have you had trouble falling asleep or staying asleep?" with answers ranging from 0 (= *never*) to 4 (= *all the time*). Fourth, the question assessed respondents' alcohol use "How often do you drink alcohol?" with answers ranging from 0 (= *never*) to 4 (= *daily or almost daily*). Fifth, respondents were asked whether they had suffered from serious depression or from chronic anxiety in the past 12 months (0 = *no* and 1 = *yes*). Finally, a suicide attempt was assessed with the question "Have you ever attempted suicide?" (0 = *no* and 1 = *yes*). All the items described above were used in the analyses separately.

Relational well-being. The Revised Dyadic Adjustment Scale (DAS-16; Antoine, Christophe, & Nandrino, 2008) is a 16-item self-reported evaluation of relationship adjustment. The original scale (DAS-32; Spanier, 1976) comprises four subscales (i.e., consensus, satisfaction, cohesion, and affective expression). In the revised version, a two-dimensional approach is used: (a) the degree of agreement (10 items; e.g., "To what extent do you and your partner generally agree about objectives, goals that are considered important in life?") and (b) the quality of dyadic interactions (6 items; e.g., "I confide in my partner."). Respondents' answers ranged from 0 (= *never agree*) to 5 (= *always agree*).The sum score is a measure of the overall relationship quality with higher scores indicating more positive adjustment (Range: 0 – 80). In this study, Cronbach's alpha for the total DAS score was .81.

Analyses

Analyses were run in SPSS 20.0. We used a weighting variable based on the variable age because respondents in the older age category (i.e., 65 to 75 years) were overrepresented and respondents in the younger age categories (i.e., 18 to 34 years) were underrepresented in our study than would be expected by coincidence. By using a weighing variable, the answers of younger people weigh more in the statistical analyses and the answers of older people weigh less such that the results are in line of what could be expected based on the general population. Bivariate statistics (Pearson chi-square test and independent sample t-tests) were calculated to explore the link between the previously mentioned sociodemographic characteristics and IPV experiences. A series of multiple regression analyses were performed to determine the role of psychological IPV in predicting victims' individual and relational well-being.

Results

Prevalence of Physical, Psychological and Sexual IPV

Table 1 shows the descriptive statistics of our main study variables and **Table 2** provides an overview of the descriptives and frequencies of the different acts of IPV. Overall, 14.0% (n = 206) of the respondents had experienced at least one act of psychological violence by their current partner in the past 12 months. Physical IPV was reported by 1.3% of the respondents (n = 19) and 0.3% of the respondents (n = 5) reported sexual IPV in the past 12 months. The overall frequencies of psychological IPV ranged from 0 to 16, of physical IPV from 0 to 9 and of sexual IPV from 0 to 2 (see Table 1). Table 2 indicates that the most prevalent acts of psychological IPV included being criticized or ridiculed for what the respondent was doing or saying and that the respondent's partner stopped talking and refused to discuss things with him/her. The most prevalent act of physical IPV was that the partner had thrown something, shaken or grabbed the respondent. As hypothesized (cf. hypothesis 2), psychological IPV was much more prevalent than both other forms of IPV. Notwithstanding the small amount of reported physical and sexual violence, a significant correlation was found between the three different forms of IPV ($r_{\text{physical IPV and psychological IPV}} = .26$, $p < .01$; $r_{\text{sexual IPV and psychological IPV}} = .32$, $p < .01$; $r_{\text{physical IPV and sexual IPV}} = .25$, $p < .01$). With regard to gender, sexual violence was only reported by women and no significant

Variable	*N*	*M(SD)*	*Min*	*Max*
1. Psychological IPV	1472	.46 (1.53)	0.00	16.00
2. Physical IPV	1469	.03 (.33)	0.00	9.00
3. Sexual IPV	1472	.01 (.10)	0.00	2.00
4. Self-perceived general health	1471	.98 (.80)	0.00	4.00
5. Stress level	1471	1.96 (1.09)	0.00	4.00
6. Sleeping problems	1472	1.07 (1.20)	0.00	4.00
7.. Alcohol use	1472	1.66 (1.31)	0.00	4.00
8. Relationship quality	1471	44.96 (8.69)	2.00	64.00
9. Anxiety/Depression	1471	yes = 5.1%		
10. Suicide attempt	1471	yes = 2.1%		

Note. IPV = intimate partner violence.

Table 1: Descriptive Statistics of the Study Variables

IPV	*M(SD)*	*%*
Psychological IPV	.46 (1.53)	14.0
Tried to limit the contact you have with your friend(s) or family members	.07 (.40)	3.0
Insisted on knowing with whom and where you were	.12 (.53)	5.5
Sworn at you, criticized you or ridiculed you for what you were doing or saying	.12 (.49)	6.7
Stopped talking to you, totally refused to discuss things with you	.11 (.46)	5.9
Did something to intimidate you (e.g., screaming, breaking objects, threatening to kill you or threatening to commit suicide)	.05 (.31)	2.8
Physical IPV	.03 (.33)	1.3
Thrown something at you, shaken you or grabbed you suddenly	.02 (.17)	1.1
Scratched you, pinched you, bitten you or pulled your hair	.00 (.07)	0.4
Slapped you, punched or kicked you, hit you with something that hurt you	.01 (.10)	0.4
Threatened you with a weapon, a dangerous object or attempted to kill you or strangle you	.00 (.05)	0.1
Prevented you from entering your home, locked you up, locked you out, or when in the car, left you by the roadside	.00 (.04)	0.2
Sexual IPV	.01 (.10)	0.3
Forced you to carry out sexual acts that you found degrading or humiliating	.00 (.07)	0.2
Forced you to undergo sexual touching, attempted or succeeded, by force, to have sex with you against your will	.00 (.07)	0.1

Note. IPV = intimate partner violence.

Table 2: Descriptive Statistics and Frequencies of IPV Victimization in the Past 12 Months

differences were found between women and men for both physical, $t(1339.03) = 1.62$, $p = .11$, and psychological IPV, $t(1336.93) = 1.80$, $p = .07$. This indicates that women and men were equally likely to be exposed to physical and psychological violence by their current partner in the past 12 months. Because of the low numbers of respondents reporting sexual and physical IPV, cautiousness regarding the interpretation of these findings is warranted and generalization is limited. Therefore, in the further analyses, we only included data of respondents who have exclusively experienced psychological IPV in the past 12 months from their current partner ($n = 189$; 14.0% of the women and 12.3% of the men).

Sociodemographic characteristics of IPV. When examining the sociodemographic characteristics of respondents reporting psychological IPV (see **Table 3**), results revealed no significant effect of education level, area of residence, and age. An effect was found for civil state: Both single (22.3% vs. 14.1%) as well as divorced respondents (6.9% vs. 3.4%) were much more likely to report psychological IPV, compared to the other groups. Furthermore, no association was found between psychological violence and both the frequency of social activities and the frequency of social contact with friends or family. In contrast, a significant effect was found for the perception of having sufficient contact with family/friends: Among the respondents who reported not having sufficient contact with family or friends, there were more respondents reporting psychological violence (17.6% vs. 11.8%).

Psychological IPV and Individual Well-Being

Four separate hierarchical linear regressions were used to examine the effect of psychological victimization on respondents' self-perceived general health, daily stress level, sleeping problems, and alcohol use, while controlling for the possible socio-demographic characteristics gender, age and education level. Results are presented in **Table 4**. The test results showed a significant detrimental effect of psychological IPV on general health, $F(5,1427) = 27.65$, $p < .001$, on daily stress level, $F(5,1426) = 26.00$, $p < .001$, and on sleeping problems, $F(5,1426) = 19.78$, $p < .001$. No effect was found for the use of alcohol. Furthermore, results revealed two significant interactions with gender, namely for general health and daily stress level. To examine the nature of these interactions, we computed the correlations between psychological victimization and both variables separately for women and men. A significant

Variable	*M(SD)*	*Test of difference*	*Effect size*
1. Education level	-	$\chi^2(1) = .00$	*Phi* = .00
2. Area of residence	-	$\chi^2(4) = 4.55$	*V* = .06
3. Civil status	-	$\chi^2(4) = 17.70^{***}$	*V* = .11
4. Perception social contact	-	$\chi^2(1) = 4.99^{*}$	*Phi* = .06
5. Age	45.17 (14.81)	$t(1446) = .89$	*d* = -.07
6. Frequency of social activities	2.24 (1.16)	$t(1444) = -1.78$	*d* = .15
7. Frequency of social contact	3.13 (.78)	$t(1437) = 1.04$	*d* =.08

Note. IPV = intimate partner violence.
$^{*}p < .05$. $^{**}p < .001$.

Table 3: Sociodemographic characteristics of respondents reporting psychological IPV by their current partner in the past 12 months

	General health			Stress level			Sleeping problems			Alcohol use			Depression/anxiety			Suicide		
	B	***SE B***	β	***B***	***SE B***	β	***B***	***SE B***	β	***B***	***SE B***	β	***B***	***SE B***	Exp(B)	***B***	***SE B***	Exp(B)
Gender	-.07	.04	-.04	-.22***	.06	-.10	-.49***	.07	-.20	-.72***	.07	-.27	-.41	.26	.67	-.63	.41	.53
Age	.01***	.00	.22	-.01***	.00	-.19	.01***	.00	.14	-.01***	.00	-.09	.01	.01	1.01	.01	.01	1.01
Educational level	-.25***	.04	-.16	.28***	.06	.13	.04	.06	.02	-.37***	.07	-.14	-.15	.25	.86	-.71	.41	.49
Psychological IPV	.15**	.05	.26	.17**	.07	.22	.16*	.07	.19	-.10	.08	-.10	.56*	.29	1.76	.27	.28	1.32
Gender x Psychological IPV	-.08**	.03	-.22	-.09*	.04	-.18	-.05	.04	-.09	.04	.05	.06	-.38	.25	.69	-.11	.20	.90
Total R^2	.09***			.08***			.07***			.11								
Nagelkerke R													.03**			.04**		
n	1433			1432			1432			1433			1436			1436		

Note. IPV =intimate partner violence.
*** p <.001.** p< .01. * p<.05.

Table 4: Summary of Hierarchical Multiple Regression Analyses and Binary Logistic Regression Analysis Examining the Effect of Psychological IPV on Victims' Individual Well-being

	Relationship quality	
	ΔR^2	β
Step 1	.02***	
Gender		-.03
Age		-.09***
Educational level		.08**
Step 2	.09***	
Psychological IPV		-.38***
Step 3	.00	
Gender x Psychological IPV		.08
Total R^2	.11***	
n	1432	

Note. IPV = intimate partner violence.
* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 5: Summary of Hierarchical Regression Analysis to predict Relationship Quality from Psychological IPV

correlation was found between psychological IPV and general health for women ($r = .14$, $p < .01$) but not for the men. Similarly, where a significant correlation was found between psychological IPV and daily stress level for women ($r = .10$, $p < .01$), no correlation was found for men.

Suffering from anxiety or depression and suicide attempt are dichotomous categorical variables. To assess the effect of psychological victimization on these health outcomes, two binary logistic regression models were calculated (see Table 4). Respondents reporting higher levels of psychological victimization were more likely to report that they suffered from anxiety or depression in the past 12 months, $\chi^2(5) = 11.65$, $p = .04$. No significant interaction with gender was found. Differently, psychological IPV was not associated with suicide attempt, $\chi^2(5) = 10.10$, $p = .07$: Women and men reporting psychological victimization were not more likely to ever report a suicide attempt compared to their non-victimized counterparts. To conclude (cf. hypotheses 3a and 3b), psychological IPV by the current partner in the past 12 months affects victims' individual well-being, with some differences noted between women and men: Both women and men report more sleeping problems, and more anxiety or depression but only women perceive their general health as less well and experience higher levels of daily stress.

Psychological IPV and Relationship Quality

Finally, a hierarchical linear regression analysis was used to test whether relationship quality could be predicted by respondents' experiences with psychological violence (view **Table 5**). To control for possible effects of socio-demographic characteristics (i.e., gender, age, education level), these variables were entered in the first step. In the second step, respondents' scores for psychological IPV were entered and in the third step, the gender and psychological IPV interaction term were added to the model. Overall, the model was found to be significant and accounted for 11% of the variance in relationship quality, $F(5, 1427) = 35.60$, $p < .001$. Higher levels of psychological victimization

corresponded with lower scores on the dyadic adjustment scale, indicating less relationship quality. According to the insignificant interaction term both women and men reporting higher levels of psychological IPV by their current partner in the past 12 months evaluated the quality of their relationship as less well.

Discussion

The present study describes the prevalence of physical, sexual as well as psychological violence by an intimate partner. Using a nationally representative sample of the Belgian population, up-to-date victimization rates for both women and men were tested. This study additionally explored the association between IPV victimization and victims' individual and relational well-being.

These most recent prevalence estimates in the overall sample indicate that about one out of seven respondents reported psychological violence by their current partner in the last year. Physical violence by the current partner was reported by 1.3%. Sexual violence (0.3%) was only reported by female respondents. As in other prevalence studies on IPV (e.g., Marshall & Holtzworth-Monroe, 2002), this latter form is much less prevalent than physical and psychological IPV. Our Belgian findings are in line with the annual physical and sexual IPV prevalence rates of the Breiding et al. (2008) the U.S. population-based survey, yet, they are lower than the general annual IPV prevalence estimates published in the review of Krahé and colleagues (2005), which rely on different sampling and survey methods. More specifically, Krahé et al. (2005) included – next to representative samples – clinical and convenience samples which clearly lifted up the prevalence estimates whereas this study only reports on a representative sample, which have been found to detect lower estimates compared to other sorts of samples (Nielsen & Einarsen, 2008). Furthermore, except for the elevated levels of psychological IPV in the present study, our findings are in line with the French national representative survey (Jaspard et al., 2002) measuring IPV in an almost identical way as the present study. Our elevated levels for psychological IPV might be explained by the fact that the French study only reports on women aged 20–59 years old.

This study supports the more recent literature suggesting that violence by an intimate partner is not strictly a male-to-female phenomenon but a human phenomenon (Carmo, Grams, & Magalhaes 2011; Cho, 2012; Péloquin et al., 2011; Swan & Snow, 2003). That women and men in the present study report equal levels of psychological and (physical) IPV is at first sight deviant from the majority of research on IPV victimization. However, when considering the methodological context of the study, similar findings have been provided by other scholars (e.g., Archer, 2000). Concretely, previous studies on IPV in representative samples also showed little differences in prevalence estimates between women and men fitting the perspective that family researchers use to approach IPV. This perspective assumes that representative samples measure moderate and gender-balanced violence within couples (i.e., 'common couple violence') that is rather used to address conflict than to control the partner. This meaning of our findings on gender symmetry can only be formulated as an assumption because as in most other national surveys on IPV - we did not measure controlling behaviors (Anderson, 2005; Williams & Frieze, 2005) that would provide evidence for IPV as approached from a feminist perspective. The latter perspective refers to severe IPV victimization specifically driven by threats and control (i.e. 'intimate terrorism'), is more gender asymmetrical and is mainly captured in clinical samples.

With regard to sexual IPV, only women reported sexual victimization by an intimate partner in the past 12 months. Sexual aggression by an intimate partner might be more common than all other forms of sexual aggression (Marschall & Holtzworth-Monroe,

2002) and actual prevalence rates might in fact be higher than reported in the current study as it is usually one of the most difficult forms of IPV to reveal.

This study's findings concerning the sociodeomographic characteristics that might affect IPV victimization, revealed significant associations with respondents' civil status as well as with respondents' subjective experiences of social contact with family and friends. More specifically, respondents being officially single or divorced were more likely to report psychological victimization. This is consistent with other studies (Campbell et al., 2002; Coker et al., 2002) and suggests that for some people, this is a vulnerable period in which they might hanker after a new stable relationship that increases the possibility to make a 'wrong' partner choice and to get involved in a violent relationship. Furthermore, the literature describes the presence of a social network as an important protection factor in the limitation of victimization. From our findings, it became clear that there is no association between the frequency of social activities and IPV victimization. Neither does the frequency of social contact with family and friends had a link with violence by an intimate partner. The subjective experience of these social contacts, however, was linked to the occurrence of psychological violence. Therefore, the idea can be urged that victims' require more contact with family or friends than they actually have – for instance because their violent partner forces them to remain silent – which in turn leads to more dissatisfaction about these contacts. Furthermore, concerning the role of gender and education level, inconsistent findings are reported in the overall literature (Krahé et al., 2005). This study showed that psychological violence affected all respondents, regardless of their age or education level.

Our examination of the mental well-being of respondents reporting psychological IPV shows that psychological victimization in the past year is related to diminished mental health outcomes. Overall, victimized respondents report more sleeping problems and signs of depression or anxiety. Only female victims perceived their general health as less well and reported higher daily stress levels. These findings lead us to three interesting conclusions. First, it shows that psychological violence – in absence of physical and sexual IPV – has a clear negative impact on the recipient. Second, considering the relatively low frequencies of psychological violence, it demonstrates that even mild and moderate levels of psychological violence can have an influence on one's mental well-being. Last, it provides evidence that – although women suffered more than men in this study – male victims also suffer from the negative effects of psychological IPV victimization. Taken together, these results are in line with the existing evidence that psychological IPV can be as damaging as physical IPV in terms of mental health outcomes (Capeza & Arriaga, 2008) and suggests that psychological IPV victimization deserves further study among both women and men.

Most research on the link between IPV and relationship satisfaction has been conducted in clinical samples and in female victims of physical IPV. It is assumed that there is a stronger link between relationship (dis) satisfaction and IPV in clinical samples than in community samples as couples in marital therapy already report more marital distress (Williams & Frieze, 2005). However, this study also provides evidence for an association between psychological IPV and a diminished relationship quality in a community sample of women and men. This indicates that relationship dissatisfaction is not only reported in the context of severe physical abuse, but also in the context of moderate forms of psychological IPV. This is in line with some previous research that has shown that even more subtle forms of psychological abuse can be linked with a variety of negative adjustment-related variables, psychological distress, and marital dissatisfaction (Williams & Frieze, 2005).

Strengths, Limitations, and Implications

The present study reports on a large-scale representative sample of the Belgian population, including both female and male respondents from Flanders and Wallonia. A surplus value of this study is that prevalence rates were provided for psychological IPV. In general, reviews on the prevalence (Krahé et al., 2005) as well as on the health outcomes of IPV (Coker, 2007) only discuss studies that focused on physical and sexual IPV because of the small number of studies on psychological violence.

Several limitations of the study need to be addressed. First, our prevalence rates are relatively low, which suggests an underestimation of the actual prevalence rates. This is probably due to both methodological and thematic barriers. For instance, the present study is a telephone survey, which limited surveying people without a fixed telephone such as young people (who nowadays are more likely to use only cell phones) and people not living in a stable household residence. Yet, evidence exists that these groups are at greater risk to experience IPV victimization (Stith et al., 2004). In addition, many people dislike being phoned up by marketing agencies or researchers to complete surveys. Because only assertive people dare to withdraw from telephone surveys, this might have led to a selection bias. Furthermore, as this is a survey on a sensitive topic, respondents may have been reluctant to disclose IPV experiences due to feelings of shame and fear of revenge. This lack of disclosure would be more prominent in male victims than in female victims (Carmo et al., 2011).

Second, although the use of a representative community sample allowed us to gather information on the occurrence of violence within the general population, it has to be kept in mind that our sampling strategy probably elucidated only a part of the problem. As aforementioned, different types of samples tend to capture different types of IPV with victims of severe forms of intimate physical aggression being systematically excluded from community samples opposed to clinical samples (Johnson, 1995). In this respect, we believe that both community and clinical samples are necessary to grasp IPV in its entirety and that both minor and severe violence should be addressed in research in order to reduce the prevalence of IPV (Strauss, 2009).

Third, as in most other IPV studies, the cross-sectional nature of this study indicates that our findings should merely be interpreted in terms of associations. In this respect, longitudinal designs are needed to help us to clarify the causal directions of our findings and to better understand the relational processes by which intimate relationships change over time.

Fourth, a limitation of our population research on IPV was that the data were very skewed towards zero, which has implications for the power of our statistical analyses. Although this sample design provides us authentic descriptive IPV information and generates findings that are applicable to the overall population, it limited us to test individual and relational correlates for physical and sexual IPV because of the small cell accounts. When examining the health correlates of IPV in depth, future studies would benefit from using specific victims samples rather than representative samples. Fifth, this study design unfortunately put restrictions on the number of items that could be included in the survey. Therefore, only single items were used to measure individual health correlates. Standardized measures of these constructs would have been more methodologically sound to capture the mental health status of the respondents. Nevertheless, the short version of the Dyadic Adjustment Scale, which we used to examine relationship satisfaction is a valid and reliable instrument with a high degree of internal consistency.

In sum, we presented up-to-date prevalence estimates for the different forms of IPV and found no or small gender differences in the prevalence rates. Psychological IPV was more prevalent than both physical and sexual IPV, and the latter form was only reported by women. Furthermore, psychological IPV

was associated with a poorer mental well-being among both women and men, but this effect was stronger for women. Last, higher levels of psychological victimization corresponded with a devaluation of respondents' relationship quality and no gender differences were found. Despite the above-mentioned limitations of population-based research, we believe in the importance of an ongoing investment in large-scale representative surveys on violence within intimate relationships because of its implications for a national policy on IPV: It allows us to address recommendations to policy-makers, and to public and private institutions who seek to advance the prevention of violence. To our opinion, future studies would benefit from the development of a standardized instrument to measure IPV as such that with every new conducted national survey, comparisons can be made with earlier prevalence rates and that the effectiveness of both prevention and intervention strategies can be evaluated. Specifically for sexual IPV, future studies would benefit from exploring a broader range of sexually coercive behaviors within the relationship. This study, as most studies (Marschall & Holtzworth-Monroe, 2002), predominantly focused on the use of force while sexual violence also occurs in the form of non-physical acts such as for instance being naked against your will or watching sexual images against your will.

Notes

[1] See the UN Secretary-General's database on violence against women for an overview of country studies: http://sgdatabase.unwomen.org/country.action.

[2] WDM Belgium is now active under the name 'Bisnode'. For a detailed overview how Bisnode gathers and manages data, we refer the reader to www.bisnode.be

[3] Note. No Cronbach alpha was calculated for the sexual IPV scale as only two items were included.

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