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Men's (Online) Intimate Partner Violence Experiences and Mental Health: Polyvictimization, Polyperpetration and Victim-Perpetrator Overlap

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Abstract

The present study examined men's experiences of intimate partner violence (IPV) and associated mental health problems. Specifically, we investigated men's (poly)victimization, (poly)perpetration, and victim-perpetrator overlap experiences of physical, sexual, psychological, and cyber IPV, and associations with anxiety and depression. Data were collected via survey among a representative sample (n = 1587) in Ghent, Belgium. For this study, the sample consisted of 557 men in a romantic relationship. We found that polyvictimization (45.8%), polyperpetration (31.1%), and victim-perpetrator overlap (26.2% to 60.5%) were rather common among men who experienced partner violence. Polyvictims, polyperpetrators, as well as victim-perpetrators of psychological and cyber IPV reported the highest levels of anxiety and depression. Our findings emphasize the importance of addressing men's (accumulated) experiences of online and offline bidirectional IPV in research and practice, and to account for internalizing and externalizing expressions of mental health problems among male victims, perpetrators and victim-perpetrators of IPV.

Keywords: Intimate partner violence; male victims; polyvictimization; polyperpetration; victim-perpetrator overlap; bidirectional violence; mental health; cyber partner violence

Men's (Online) Intimate Partner Violence Experiences and Mental Health: Polyvictimization, Polyperpetration and Victim-Perpetrator Overlap

The relationship between intimate partner violence (IPV) experiences and mental health problems is well documented. This is particularly the case for victimization experiences of women (e.g., Ellsberg et al., 2008), as an abundant amount of research on IPV has predominantly focused on female victims and male perpetrators, often neglecting male victims. However, research that focuses on male victims of IPV is increasing (Bates, 2019; Espinoza & Warner, 2016). Although prevalence rates strongly vary depending on the type and severity of IPV behaviour that is examined, numerous studies investigating male victimization of IPV report relatively high prevalence rates, with some studies reporting prevalence rates comparable to rates of female victimization (Carney & Barner, 2012; Dutton & White, 2013). In Belgium, a survey study among a representative sample of adults found that 43.7% of men had experienced physical violence and/or psychological violence (i.e., excessive controlling behaviours and emotional abuse) by their partner (Pieters et al., 2010). In the same study, Pieters and colleagues found that male victims of IPV were particularly vulnerable to mental health problems, specifically depression and anxiety, more so than male non-victims, female non-victims, and even female victims. In their literature review, Randle and Graham (2011) also identified male vulnerability to adverse mental health outcomes as a result of IPV experiences.

These findings exemplify the importance of developing a better understanding of men's IPV experiences. Despite increased research attention, several important knowledge gaps still exist concerning men's IPV experiences and associated mental health problems. The present study will focus on (1) the co-occurrence of different types of IPV and (2) victim-perpetrator overlap in men's IPV experiences, and associations with anxiety and depression.

Co-Occurrence of IPV Types and the Relationship with Mental Health

It is widely acknowledged that IPV victimization and/or perpetration experiences rarely occur in a vacuum. Evidence for the co-occurrence of different types of IPV is abundant (e.g., Krebs et al., 2011), and is found in female as well as male samples (Morgan & Wells, 2016). Nevertheless, most studies on the association between men's IPV experiences and mental health problems have neglected to include polyvictimization (i.e., victimization of multiple types of IPV) and polyperpetration (i.e., perpetration of multiple types of IPV) experiences. Only a few studies have investigated the relationship between polyvictimization and mental health in the context of IPV. In a large-scale survey study among male and female college students in the U.S., it was found that more than half of victimized men experience polyvictimization of two or more types of IPV (Sabina & Straus, 2008), and that polyvictimization, more than victimization experiences of one type of IPV, was related to adverse mental health outcomes, such as post-traumatic stress disorder.

These findings underline the need to include polyvictimization in studies on men's IPV experiences. Further, to the best of our knowledge no study has yet examined men's polyperpetration experiences of IPV in relation to mental health, despite existing scientific evidence linking IPV perpetration to mental health problems (Shorey et al., 2012; Spencer et al., 2019). Studies that have considered multiple types of IPV, albeit rarely regarding men's experiences, primarily focused on IPV in the offline context. Physical, sexual, and, to a lesser extent, psychological IPV are most of the time investigated (e.g., Coker et al., 2002), while online forms of IPV are rather overlooked. Recent technological developments and the exponential growth of social media provide individuals with ample opportunities to control and monitor their partner's behaviours and to express hurtful remarks (Vaterlaus et al., 2018), often referred to as *cyber partner violence*. Compared to offline forms of IPV, cyber IPV offers additional challenges for victims (and opportunities for perpetrators) as the online

environment exceeds geographical boundaries, making victims easily accessible (Cava et al., 2020). The ubiquitous role of technology in our lives and the lack of such geographical boundaries facilitate for cyber IPV to occur in a frequent manner. Indeed, cyber IPV is a highly prevalent phenomenon, with previous research reporting prevalence rates up to 73% (for a systematic review, see Caridade et al., 2019). In relation to mental health problems, it was found that victimization of cyber IPV is associated with anxiety (Wright, 2016) and depression (Zweig et al., 2014). It is argued that victims of online controlling behaviours and hurtful remarks may find it more difficult to escape the behaviour and the psychological impact of these behaviours compared to victimization in offline settings, as these digital messages may remain accessible in cyberspace (Stonard et al., 2017; Temple et al., 2016). For perpetration experiences of cyber IPV, much remains unknown about associated mental health problems, as the amount of studies examining this relationship is severely limited.

In a survey study among a sample of college students aged 18-58 (30.5% male), Curry and Zavala (2020) found a significant positive correlation between depressive symptoms and cyber IPV perpetration, although depression was no longer a significant predictor upon inclusion of other variables in subsequent regression analyses. Despite this, extensive examinations of the co-occurrence of cyber IPV and other offline types of IPV and associations with mental health problems are considerably lacking, especially among male samples. Thus, the present study will add to the literature by examining the co-occurrence of four types of IPV, specifically physical, sexual, psychological, and cyber IPV, and by assessing the relationship between such polyvictimization and -perpetration experiences and mental health problems among a representative male sample.

Partner Violence Victim-Perpetrator Overlap and Mental Health

Studies have consistently shown that IPV is in many cases a bidirectional phenomenon (Langhinrichsen-Rohling et al., 2012; Stets & Straus, 1989), indicating that partners in violent

relationships can both be victim and perpetrator (i.e., victim-perpetrators) of IPV. In his well-known typology of IPV, Johnson (2008) also accounted for bidirectionality in violent relationships. Numerous studies have indeed documented the existence of victim-perpetrator overlap in IPV (Muftić et al., 2015; Straus, 2008; Tillyer & Wright, 2014), and several studies have identified individual differences between victims, perpetrators, and victim-perpetrators of IPV (Melander et al., 2010; Richards et al., 2017).

In relation to mental health, Ulloa and Hammett (2016) found that individuals who were victim-perpetrators of IPV reported more depressive symptoms than individuals who were either victim or perpetrator. In their longitudinal study, Temple and colleagues (2005) found that women who experienced bidirectional IPV reported worse mental health effects than women who experienced unidirectional IPV. Additionally, in their literature review, Jennings and colleagues (2012) identified that victim-perpetrator overlap particularly occurs among people with a mental disorder. Among men seeking healthcare, Rhodes and colleagues (2009) found that men who reported both victimization and perpetration experiences of IPV had the highest levels of adverse mental health problems. Whereas these findings endorse the commonly raised argument that IPV should be examined as both an unidirectional and bidirectional phenomenon, to our knowledge, no study has yet examined differences in mental health problems between victims, perpetrators, and victim-perpetrators of physical, sexual, psychological, and cyber IPV in a male-only sample. The present study will add to the literature by examining the prevalence of victim-perpetrator overlap in men's experiences of physical, sexual, psychological, and cyber IPV, and by assessing differences in mental health problems, specifically anxiety and depression, among male victims, perpetrators, and victim-perpetrators of these four types of IPV.

Thus, the present study has two research aims. First, we will examine the co-occurrence of physical, sexual, psychological, and cyber IPV among men, and how these

polyvictimization and -perpetration experiences relate to feelings of anxiety and depression. We expect that feelings of anxiety and depression will be higher among men who were victim or perpetrator of multiple types of IPV compared to men who experienced one type of IPV or no IPV at all. Second, we will examine victim-perpetrator overlap in men's experiences of these four IPV types, and we will study feelings of anxiety and depression among male victims, perpetrators, and victim-perpetrators of physical, sexual, psychological, and cyber IPV. We expect that for all four types of IPV, anxiety and depression will be highest among victim-perpetrators.

Methods

Procedure & Sample

Data were gathered through a stratified survey study among citizens of Ghent in Belgium. Data collection took place from October to November in 2019. People were selected to participate by means of a representative random sampling technique. The sample was representative in terms of sex (man/woman), age (18 – 65+ years), and nationality (Belgian/non-Belgian). Selected respondents were visited at their home address by trained interviewers and the survey was filled out through a face-to-face interview. The survey was completed in the online survey tool Qualtrics using an ICT-device (e.g., tablet or laptop). Respondents were informed about the purpose of the study and gave informed consent. As some of the survey questions were sensitive, like the questions about respondents' IPV experiences, part of the survey was only filled out by the respondent, without interference of the interviewer. If respondents refused to participate or could not be reached, backup samples were created using the same representative random sampling technique. For each selected respondent, seven backup respondents were selected that were similar to the first selected respondent in terms of sex, age category, and nationality. This way, the representative nature of our study sample was retained. Ethical approval for this study was obtained from the ethics

committee of the Faculty of Social and Political Sciences at Ghent University. For a detailed overview of the study procedure, see Hardyns et al. (2019).

Out of the total 1587 people who took part in the survey, 772 (48.6%) were men. Of them, 557 were in a romantic relationship, 534 (95.9%) of whom were in a heterosexual relationship with a female partner. In the present study, IPV experiences of this subsample of 557 men (M_{age} = 48.3 years, SD_{age} = 16.98) were examined.

Measures

Respondents provided information about their victimization and perpetration experiences of physical, sexual, psychological, and cyber IPV with their current partner during the past 12 months, as well as their feelings of anxiety and depression. All measures of IPV were administered twice: once to assess victimization experiences of the described behaviours, and once to assess perpetration experiences. Generally, all IPV variables were measured with a small amount of items. For physical and sexual IPV, only one item was administered. The reason for this limited amount of items was mainly practical, as we did not want to burden our respondents with a large battery of questions about highly sensitive matters that may be particularly painful to relive or may be difficult to reflect on. A large amount of questions could also result in fatigue or boredom in respondents. By employing fewer items, we aimed to retain respondents' willingness to answer all survey questions.

Physical IPV. Physical IPV was measured with a single item derived from the physical assault subscale of the revised Conflict Tactics Scale (CTS2; Straus et al., 1996): "During the past 12 months … [I have / My partner has] purposefully hit, scratched, pushed, bitten or in another way physically hurt [my partner / me]." Answers were given on a 5-point frequency scale, in which 1 = 'never', 2 = 'rarely', 3 = 'sometimes', 4 = 'often', and 5 = 'very often.'

Sexual IPV. Sexual IPV was measured with a single item: "During the past 12 months … [I have / My partner has] engaged in sexual activities with [my partner / me] against [my /

their] will because [they / I] insisted". Answers were given on a 5-point frequency scale from 1 = 'never' to 5 = 'very often.'

Psychological IPV. Psychological IPV was measured with an abbreviated version of the Multidimensional Measure of Emotional Abuse (Murphy & Hoover, 1999). Murphy and Hoover (1999) identified four subscales, namely hostile withdrawal, domination/intimidation, denigration and restrictive engulfment. In the present study, psychological IPV was conceptualized as controlling behaviour and making hurtful remarks. As such, we retained items from the denigration (3 items) and restrictive engulfment (4 items) subscales. Items with highest factor loadings (as reported by Murphy and Hoover) were selected for the present survey. For the denigration subscale, a sample item is "During the past 12 months … [I have / My partner has] called [my partner / me] worthless." A sample item from the restrictive engulfment subscale is "During the past 12 months … [I have / My partner has] asked where [my partner has / I have] been or who [my partner / I] had been with in a suspicious manner." Answers were given on a 5-point frequency scale ranging from 1 = 'never' to 5 = 'very often.' Principal components factor analysis (with oblimin rotation) extracted two factors for both the victimization and perpetration scales. However, for both scales, all items loaded higher on factor 1 (ranging from .624 to .776 for victimization, and from .518 to .731 for perpetration[1]) compared to factor 2, and a one-factor solution was retained. Additionally, both the victimization (α = .80) and perpetration scale (α = .75) demonstrated good reliability.

Cyber IPV. Cyber IPV was measured with an abbreviated three-item scale adapted from the Cyber Dating Abuse Questionnaire (Borrajo et al., 2015), as previously employed by Van Ouytsel et al., 2016. The scale measured the occurrence of online controlling behaviours during the past 12 months, specifically (1) excessive texting and (2) excessive calling to

[1] For the perpetration scale, one of the seven items had a higher factor loading for factor 2 (.586) compared to factor 1 (.566). As this difference in factor loading was minimal, we decided to retain a one-factor solution for both the victimization and perpetration scale of psychological IPV.

control what the partner was doing and with whom, and (3) examining the content of emails, texts and social media without permission. Answers were given on a 5-point frequency scale from 1 = 'never' to 5 = 'very often.' Principal components factor analysis (with oblimin rotation) revealed a one-factor structure, with factor loadings ranging from .703 to .854 for victimization and .695 to .835 for perpetration. In the present study, both the victimization (α = .65) and perpetration (α = .65) scale demonstrated acceptable reliability.

Anxiety and depression. Anxiety and depression were both measured with an abbreviated version of the Depression Anxiety Stress Scale (DASS-21, Lovibond & Lovibond, 1995). We used three items for anxiety and four items for depression. The selection of these items was based on factor loadings as reported in previous research (De Beurs et al., 2001). For both the anxiety and depression subscale, all items were answered on a 5-point frequency scale from 1 = 'never' to 5 = 'very often.' For anxiety, a sample item is "I felt I was close to panic". The anxiety subscale demonstrated good reliability, with a Cronbach's alpha of .83. For depression, a sample item is "I felt down-hearted and blue". The depression subscale also demonstrated good reliability in the present sample (α = .86).

Statistical Approach

All analyses were conducted in SPSS (version 26). Statistical significance was set at $p \leq .05$. First, victimization and perpetration prevalence rates of physical, sexual, psychological, and cyber IPV were examined. To do so, the continuous scales of each of the IPV variables were recoded to create dichotomous variables, distinguishing between men who never experienced IPV (= 0) and men who experienced IPV at least once (= 1). Second, as IPV experiences were not normally distributed among the sample, Spearman correlation analyses were conducted to examine associations between victimization and perpetration experiences of physical, sexual, psychological, and cyber IPV, and with anxiety and depression.

Third, we examined the association of IPV polyvictimization and polyperpetration with anxiety and depression. We first created polyvictimization and polyperpetration grouping variables through four mutually exclusive categories: 0) no IPV experienced; 1) experienced one type of IPV; 2) experienced two types of IPV; 3) experienced three or four types of IPV. Thus, these analyses were conducted among the entire sample of 557 men. Here, we did not distinguish between the type of IPV someone experienced, as the goal of this analysis was to determine the impact of accumulated IPV experiences. This means that, for example, men who only experienced physical violence were grouped together with men who only experienced psychological IPV. After creating the groups, we conducted non-parametric Kruskal-Wallis H tests (KWH test; Kruskal & Wallis, 1952) to examine differences in anxiety and depression among the four (poly)victimization and (poly)perpetration groups. To determine which groups in particular differed in their mental health problems, we conducted post hoc Dunn's tests (1964) with Bonferroni adjustments for multiple comparisons.

Lastly, we examined the prevalence of victim-perpetrator overlap and associations with mental health problems. For each type of IPV, we created grouping variables with four mutually exclusive categories: 0) neither victim nor perpetrator; 1) victim; 2) perpetrator; and 3) victim-perpetrator. Preliminary analyses revealed that men who were neither victim nor perpetrator experienced significantly less anxiety and depression than men who experienced IPV in some way (as victim, perpetrator, or victim-perpetrator). As we aimed to assess mental health problems among men who did experience IPV, the group of men who were neither victim nor perpetrator was omitted from further analyses. Further analyses were conducted among subsamples of 36 (physical IPV), 84 (sexual IPV), 405 (psychological IPV) and 318 (cyber IPV) men. KWH tests and Dunn's post hoc comparisons were performed to assess differences in anxiety and depression between victims, perpetrators, and victim-perpetrators.

Results

Prevalence of IPV Victimization and Perpetration

The prevalence rates for victimization and perpetration of physical, sexual, psychological, and cyber IPV are presented in Table 1. We found IPV prevalence rates ranging from 4.3% (perpetration of physical IPV) to 68.4% (victimization of psychological IPV).

Table 1.

Prevalence of IPV Victimization and Perpetration Experiences

		Prevalence (n/%)
Physical IPV	Victimization	29 (5.2%)
	Perpetration	24 (4.3%)
Sexual IPV	Victimization	41 (7.4%)
	Perpetration	65 (11.7%)
Psychological IPV	Victimization	381 (68.4%)
	Perpetration	269 (48.3%)
Cyber IPV	Victimization	290 (52.1%)
	Perpetration	220 (39.5%)

Note. n = 557. Presented prevalence rates indicate the amount and percentage of people who experienced IPV at least once

Associations between Physical, Sexual, Psychological, and Cyber IPV and Mental Health

The rank correlation coefficients for the associations between victimization and perpetration experiences of the four types of IPV and the associations between these IPV experiences and feelings of anxiety and depression are presented in Table 2. Our analyses show that all IPV experiences were significantly correlated with each other. We found significant positive correlations between *victimization* experiences of different types of IPV (ranging from ρ = .175 between sexual and cyber IPV to ρ = .471 between psychological and cyber IPV). Additionally, we found significant positive correlations between *perpetration* experiences of different types of IPV (ranging from ρ = .235 between sexual and cyber IPV to ρ = .432 between psychological and cyber IPV). These findings imply that victimization experiences co-occur for multiple types of IPV, as do perpetration experiences, and provide evidence that polyvictimization and polyperpetration are present among the men in our

sample. As shown in Table 2, the highest correlation coefficients were found between victimization and perpetration experiences of the *same type* of IPV (ranging from ρ = .379 for sexual IPV to ρ = .631 for cyber IPV). The finding that victimization and perpetration experiences of the same type of IPV tended to co-occur, warrants further examinations of victim-perpetrator overlap in men's IPV experiences.

Table 2.

Spearman Correlations between Physical, Sexual, Psychological, and Cyber IPV, and Mental Health

	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. Physical – Victimization	-								
2. Physical – Perpetration	.630***	-							
3. Sexual – Victimization	.307***	.247***	-						
4. Sexual – Perpetration	.221***	.286***	.379***	-					
5. Psychological – Victimization	.236***	.238***	.278***	.362***	-				
6. Psychological – Perpetration	.243***	.273***	.287***	.359***	.600***	-			
7. Cyber – Victimization	.178***	.210***	.175***	.195***	.471***	.351***	-		
8. Cyber – Perpetration	.212***	.236***	.191***	.235***	.404***	.432***	.631***	-	
9. Anxiety	.088*	.097*	.108*	.103*	.167***	.256***	.184***	.197***	-
10. Depression	.122**	.172***	.169***	.171***	.309***	.352***	.173***	.188***	.509***

Note. *$p \leq .05$; **$p \leq .01$; ***$p = .000$

We also examined associations between men's IPV experiences and feelings of anxiety and depression. For all IPV experiences, we found significant positive correlations with anxiety and depression. For anxiety, the strongest associations were found for perpetration of psychological (ρ = .256) and cyber (ρ = .197) IPV. For depression, the strongest associations were found for victimization (ρ = .309) and perpetration (ρ = .352) of psychological IPV.

Anxiety and depression were strongly positively correlated (ρ = .509), indicating that men who experienced more feelings of anxiety also experienced more feelings of depression.

Polyvictimization, Polyperpetration, Anxiety, and Depression

To assess the associations between polyvictimization and polyperpetration experiences and mental health problems, we first examined the prevalence of IPV polyvictimization and polyperpetration in the study sample. The distributions of the polyvictimization and polyperpetration groups (i.e., no IPV; one type of IPV; two types of IPV; three or four types of IPV) are displayed in Table 3. For IPV (poly)victimization, we found that most men were victim of two types of IPV. Almost half of the men (45.8%) were victim of two to four types of IPV. For (poly)perpetration, we found that the largest group was comprised of men who did not perpetrate any IPV, followed by the group of men who perpetrated one type of IPV. Almost one third (31.1%) of the men perpetrated two to four types of IPV.

Table 3.

Prevalence of Polyvictimization and Polyperpetration

	(Poly)victimization (n/%)	**(Poly)perpetration (n/%)**
No IPV	126 (22.6%)	214 (38.4%)
One type of IPV	176 (31.6%)	170 (30.5%)
Two types of IPV	211 (37.9%)	123 (22.1%)
Three or four types of IPV	44 (7.9%)	50 (9.0%)

Note. n = 557.

Polyvictimization. We examined the relation between IPV polyvictimization experiences and anxiety and depression. A multivariate KWH test was conducted to assess differences in mental health between the groups of (poly)victims. We found that there were significant differences in feelings of anxiety and depression between groups of (poly)victims. The results are presented in Table 4.

Table 4.

Anxiety and Depression per Polyvictimization and Polyperpetration Group

	Anxiety			Depression		
	M (SD)	M Rank	KWH	M (SD)	M Rank	KWH
Polyvictimization			19.124***			44.189***
No victimization	1.41 (0.79)	244.63		1.48 (0.74)	215.16	
One type of IPV	1.38 (0.54)	266.81		1.65 (0.69)	267.70	
Two types of IPV	1.50 (0.60)	295.92		1.80 (0.70)	306.48	
Three or more types of IPV	1.73 (0.79)	345.05		2.16 (0.83)	375.25	
Polyperpetration			37.369***			63.088***
No perpetration	1.31 (0.58)	237.31		1.47 (0.62)	218.73	
One type of IPV	1.48 (0.69)	280.07		1.78 (0.80)	292.47	
Two types of IPV	1.59 (0.65)	322.45		1.89 (0.74)	323.78	
Three or more types of IPV	1.70 (0.68)	346.92		2.09 (0.61)	380.98	

Note. KWH = Kruskal Wallis test statistic. ****p* = .000

To assess which groups specifically differed in feelings of anxiety and depression, we conducted Dunn's post hoc comparisons. We found that men who were never victim (z = 100.42, p = .000) and men who were victim of one type of IPV (z = 78.24, p = .011) experienced significantly less anxiety than men who were victims of three or four types of IPV. Men who were never victim also reported significantly less anxiety than men who were victim of two types of IPV (z = 51.29, p = .014). For depression, we found that men who were never victim of IPV experienced significantly less depressive symptoms than men who were victim of one (z = 52.54, p = .026), two (z = 91.32, p = .000), or three or four (z = 160.09, p = .000) types of IPV. Men who were victim of one type of IPV experienced less depressive symptoms than men who were victim of three or four types (z = 107.55, p = .000). Thus, victimization of multiple types of IPV was related to the most mental health problems in men.

Polyperpetration. Similar to our assessment of polyvictimization experiences and mental health, we conducted a multivariate KWH test to examine differences in anxiety and

depression between different groups of (poly) perpetrators. We found that there were significant between group differences in feelings of anxiety and depression (see Table 4).

Dunn's post hoc comparisons were conducted to determine which groups of (poly)perpetrators specifically differed in feelings of anxiety and depression. We found that men who never perpetrated IPV experienced less feelings of anxiety than men who perpetrated one ($z = 42.76$, $p = .032$), two ($z = 85.14$, $p = .000$), or three or four ($z = 109.61$, $p = .000$) types of IPV. Men who perpetrated one type of IPV experienced less anxiety than men who perpetrated three or four types ($z = 66.85$, $p = .033$). For depression, we found that men who never perpetrated IPV reported significantly less depressive symptoms than men who perpetrated one ($z = 73.74$, $p = .000$), two ($z = 105.04$, $p = .000$), or three or four ($z = 162.25$, $p = .000$) types of IPV. Men who perpetrated three or more types of IPV experienced more depressive symptoms than men who perpetrated one type of IPV ($z = 88.506$, $p = .003$). The more types of IPV men perpetrated, the more mental health problems they experienced.

Anxiety and Depression in Victims, Perpetrators, and Victim-Perpetrators

For each type of IPV, we examined the occurrence of victim-perpetrator overlap by creating groups of victims, perpetrators, and victim-perpetrators. The group distributions per IPV type are presented in Table 5. KWH tests were conducted to determine differences in anxiety and depression among victims, perpetrators, and victim-perpetrators for each type of IPV. The results of the KWH tests are presented in Table 6.

Table 5.

Categories of Victims, Perpetrators, and Victim-Perpetrators per IPV

Type of IPV	Victim (n/%)	Perpetrator (n/%)	Victim-perpetrator (n/%)	Total (n)
Physical	12 (33.3%)	7 (19.4%)	17 (47.2%)	36
Sexual	19 (22.6%)	43 (51.2%)	22 (26.2%)	84
Psychological	136 (33.6%)	24 (5.9%)	245 (60.5%)	405
Cyber	98 (30.8%)	28 (8.8%)	192 (60.4%)	318

Note. Percentages were calculated for the total amount of men who reported to have experienced this type of IPV in some way (see final column for total amounts), not for the full sample ($n = 557$).

Table 6.

Anxiety and Depression in Victims, Perpetrators, and Victim-Perpetrators per IPV Type

	Anxiety			Depression		
	M (SD)	M Rank	KWH	M (SD)	M Rank	KWH
Physical IPV			2.070			4.354
Victims	1.42 (0.47)	15.67		1.71 (0.74)	13.54	
Perpetrators	1.71 (1.08)	17.21		2.39 (1.33)	19.21	
Victim-perpetrators	1.80 (0.70)	21.03		2.29 (0.61)	21.71	
Sexual IPV			1.114			5.291
Victims	1.53 (0.54)	42.03		2.03 (0.91)	43.13	
Perpetrators	1.48 (0.48)	40.43		1.84 (0.57)	37.41	
Victim-perpetrators	1.82 (0.93)	46.95		2.24 (0.73)	51.91	
Psychological IPV			20.746***			20.807***
Victims	1.34 (0.56)	169.07		1.61 (0.66)	166.23	
Perpetrators	1.97 (1.11)	246.83		2.13 (1.09)	231.15	
Victim-perpetrators	1.55 (0.62)	217.54		1.92 (0.74)	220.65	
Cyber IPV			7.581*			7.451*
Victims	1.42 (0.62)	143.05		1.72 (0.85)	142.17	
Perpetrators	1.38 (0.54)	142.14		1.71 (0.81)	142.84	
Victim-perpetrators	1.59 (0.65)	170.43		1.85 (0.65)	170.77	

Note. KWH = Kruskal Wallis test statistic.
*$p < .05$; ***$p = .000$

Physical IPV. Of the 36 men that reported to have experienced physical IPV with their partner, almost half were victim-perpetrators. We found no differences in feelings of anxiety and depression between victims, perpetrators, and victim-perpetrators of physical violence.

Sexual IPV. The largest group of men who experienced sexual IPV in some way were perpetrators of sexual violence. Similar to physical IPV, we found no differences in anxiety and depression between victims, perpetrators, and victim-perpetrators of sexual IPV.

Psychological IPV. By far, most men who experienced psychological IPV were victim-perpetrators. We found that victims, perpetrators, and victim-perpetrators of psychological IPV significantly differed in feelings of anxiety and depression. Through post hoc Dunn tests, we found that victims experienced significantly less anxiety than perpetrators ($z = 77.76$, $p = .005$) and victim-perpetrators ($z = 45.47$, $p = .000$) of psychological IPV. Perpetrators and victim-perpetrators did not significantly differ in feelings of anxiety. For depression, we found that victims experienced significantly less depressive symptoms than perpetrators ($z = 64.91$, $p = .034$) and victim-perpetrators ($z = 54.42$, $p = .000$). Similar to anxiety, no differences in depressive symptoms were found between perpetrators and victim-perpetrators.

Cyber IPV. Similar to psychological IPV, most men who experienced cyber IPV were victim-perpetrators. KWH tests revealed significant differences in anxiety and depression between victims, perpetrators, and victim-perpetrators. Specifically, we found that victims of cyber IPV experienced less anxiety ($z = 27.38$, $p = .035$) and less depression ($z = 28.60$, $p = .034$) than victim-perpetrators. We found no differences in anxiety and depression between victims and perpetrators of cyber IPV, nor between perpetrators and victim-perpetrators.

Discussion

In this study, we examined men's IPV experiences and associated mental health problems. We set out to (1) identify polyvictimization and polyperpetration experiences and their associations with anxiety and depression, and (2) assess victim-perpetrator overlap in physical, sexual, psychological, and cyber IPV experiences and differences in anxiety and depression between victims, perpetrators, and victim-perpetrators.

First, we found that all types of men's IPV experiences were significantly correlated which each other, indicating the presence of polyvictimization and polyperpetration experiences. Specifically, we found that half of the men experienced IPV polyvictimization and that one-third engaged in polyperpetration of IPV. As we found that more men reported

victimization of multiple types of IPV than perpetration, this further underlines the importance to include male victims in IPV research and practice. Additionally, in relation to mental health problems, we found that polyvictims and polyperpetrators reported more feelings of anxiety and depression than men who experienced one type of IPV or no IPV at all. This finding is in line with findings of Sabina and Straus (2008), and implies that the impact of experiencing multiple types of IPV goes beyond the effect that each specific type of IPV experience may individually have. We encourage IPV researchers and mental health practitioners to account for the co-occurrence of different types of IPV in men's experiences of IPV victimization and perpetration, and to pay additional attention to the occurrence of IPV in the online context. As the relatively small group sizes did not allow us to additionally explore which specific combinations of IPV types most commonly occurred and most strongly related to mental health problems, future research should further dissect the relation between men's experiences of multiple IPV types and mental health.

Second, we examined the overlap in IPV victimization and perpetration experiences among men. For each type of IPV, we found significant associations between victimization and perpetration experiences, implying that IPV may occur in a bidirectional way, with men being both victim and perpetrator. This finding is in line with previous studies on the bidirectionality and gender symmetry in IPV experiences (e.g., Langhinrichsen-Rohling et al., 2012). Additionally, we examined differences in mental health problems among male victims, perpetrators, and victim-perpetrators for each type of IPV. For psychological IPV, we found that perpetrators and victim-perpetrators reported more anxiety and depression than victims. For cyber IPV, we also found that victim-perpetrators experienced more anxiety and more depressive symptoms than victims. Our finding that victim-perpetrators experience more mental health problems than victims of unidirectional IPV is in a way consistent with findings from previous research (Ulloa & Hammett, 2016), although much remains unknown as to why

this is the case. A possible explanation could be that mental health problems are both the cause and consequence of the reported IPV experiences. As suggested by the general strain theory (Agnew, 2006), IPV victimization may result in feelings of anxiety and depression, and IPV perpetration may be a way to cope with these feelings (e.g., Curry & Zavala, 2020). Future research that aims to determine which (temporal) mechanisms underlie the association between men's victim-perpetrator experiences and mental health problems is warranted. Additionally, we found no differences in mental health problems between male victims, perpetrators, and victim-perpetrators of physical and sexual violence. From a methodological perspective, a possible explanation for this might be that group sizes were particularly small for these two physical types of IPV. As the study sample was representative, incidences of physical and sexual IPV were rather low. Future research examining men's physical and sexual IPV experiences among samples with higher IPV prevalence rates is needed to gain further insight into (mental health) differences between male victims, perpetrators, and victim-perpetrators of these IPV types.

Whereas all measured IPV experiences were significantly correlated, higher correlations were found between victimization and perpetration experiences of the same type of IPV compared to those between victimization experiences or perpetration experiences of different types of IPV. In other words, men were more likely to be both victim and perpetrator of one IPV type than to be either a victim or a perpetrator of two different types of IPV. This finding indicates that IPV often occurs due to complex, adverse relationship dynamics, and further underlines the need to examine IPV as a bidirectional phenomenon.

Study Limitations

Several limitations should be considered while interpreting the study findings. First, as our data were gathered through self-report measures, they are susceptible to individual biases such as recall bias and social desirability bias. Furthermore, as we did not collect data from

both partners in the relationship, we were unable to assess the exact nature of bidirectional IPV experiences and the complex relationship dynamics in which they occurred. Additionally, due to the cross-sectional design of our study, we cannot make causal inferences regarding the relationship between IPV experiences and mental health problems. Whereas some studies imply that anxiety and depression are consequences of IPV experiences (e.g., Coker et al., 2002), others suggest that symptoms of mental health problems are precursors of a vulnerability to experience IPV (Lehrer et al., 2006). Future research that examines men's IPV experiences and the association with mental health by employing a dyadic and longitudinal design is needed. Additionally, whereas anxiety and depression are generally considered to be strongly associated with IPV, some scholars argue that men are more likely to express this emotional distress in an externalizing (e.g., anger; alcohol abuse) rather than an internalizing way (Afifi et al., 2009; Cochran & Rabinowitz, 2000). Future research should expand on the present study by measuring additional adverse feelings and behaviours that may be associated with male (poly)victimization and (poly)perpetration experiences of IPV.

To shield our respondents from emotional discomfort and fatigue, only a small amount of items were used to measure the various IPV types, and physical and sexual IPV were even measured with single-item scales. Although the applicability and reliability of single-item scales is supported by recent studies (e.g., Bergkvist & Rossiter, 2007; Jovanović & Lazić, 2018), the range of measured physical and sexual IPV behaviours, and consequently the observed prevalence rate, is limited. Future research examining men's experiences of multiple offline and online types of IPV should employ more extensive measures to attain a more comprehensive understanding of these phenomena. Also, both the victimization and perpetration scales of cyber IPV demonstrated rather low reliability rates, which may have resulted in inflated correlation coefficients. Future research on the relationship between online and offline IPV should consider an alternative scale to measure cyber IPV (for an overview,

see Rodríguez-Domínguez et al., 2020). In addition to this, prevalence rates of IPV were determined by employing the dichotomous categorization 'never' versus 'at least once'. As such, classifications of victims and perpetrators were rather liberal. For example, through this categorization, men who rarely experienced hurtful remarks by their partner and did not experience any other harmful behaviours were still classified as victims of psychological IPV. Although these broad classifications of IPV victimization and perpetration may have resulted in exaggerated prevalence rates, we advocate for an inclusive approach instead of more narrow categorizations of IPV experiences, as the latter may leave behind people who did in fact experience IPV but whose experiences might not be considered as such by others.

Lastly, we deliberately refrained from making comparisons between men and women in the present study. Studies discussing sex differences in IPV victimization and perpetration experiences and mental health problems are abundant, and more often than not their findings rationalize research approaches with a strong focus on female victims, neglecting experiences of male victims. Research and discussions dedicated to pinpoint and magnify differences between male and female victims and perpetrators of IPV and associated mental health problems distract from the common underlying goal, that is, to tackle the problem of violence within intimate relationships, and to provide help and support to anyone affected by IPV.

Implications

Our study findings offer several implications for IPV research and practice. First, as over two-third of men experienced psychological IPV and more than half experienced cyber IPV, this underlines the importance to also account for these types of IPV in prevention and intervention efforts. Adapting such a multifaceted approach to IPV is particularly important in interventions concerning the mental health of victims and perpetrators, as we found that psychological IPV, more than any other IPV type, is strongly associated with depressive symptoms. Additionally, the high prevalence of cyber IPV and the co-occurrence with other

IPV types advocates for the use of online means to reach IPV victims and perpetrators in education, research, and healthcare settings. The finding that many men experienced polyvictimization and polyperpetration provides further ground for these recommendations. Additionally, instead of being either a victim or a perpetrator, many men were victim-perpetrators. Given that most men in our sample had a female partner (95.9%), these findings echo those of previous research identifying gender symmetry in IPV experiences (Straus, 2009). Moreover, our findings reinforce recommendations from previous research, encouraging practitioners to recognize the potentially reciprocal nature of IPV within violent relationships (Bates, 2016; Langhinrichsen-Rohling et al., 2012). Also, our findings provide support for a more inclusive and fluid approach in the design and implementation of IPV interventions, rather than making discrete victim versus perpetrator distinctions using fixed intervention approaches.

Together, our study findings indicate that practitioners employing IPV screening methods among men should 1) approach IPV as a multifaceted phenomenon, accounting for the co-occurrence of multiple IPV types; 2) exceed discrete victim versus perpetrators distinctions and consider relationship dynamics that may reveal bidirectional patterns of IPV; and 3) look for both internalizing and externalizing behaviours signalling mental health problems among male victims, perpetrators and victim-perpetrators of IPV. With these screening strategies, a more comprehensive understanding of male IPV experiences can be acquired, enabling practitioners to provide the most adequate care to those in need.

Disclosure of Interest The authors have no conflicts of interest to declare.

Ethical Standards and Informed Consent All procedures followed were in accordance with the ethical standards of the responsible committee on human experimentation [institutional and national] and with the Helsinki Declaration of 1975, as revised in 2000. Informed consent was obtained from all respondents for being included in the study.

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