Prevalence of psychological and physical intimate partner aggression in Madrid (Spain): A dyadic analysis

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Abstract

Background: The goal of the present study is to analyze the prevalence of bidirectional psychological and physical aggression in intimate partner relationships using the Conflict Tactics Scale (CTS-2), and to determine the influence of the variables age and relationship duration. Method: The participants were 3,578 heterosexual couples from the Region of Madrid. Results: Bidirectional aggression was the most frequent pattern in the dyadic types of aggression examined; we analyzed the prevalences of mutual psychological (46%) and physical aggression (4%), reciprocal psychological (41%) and physical aggression (3%), and bidirectional psychological (80%) and physical aggression (25%). The variables age and relationship duration were significant predictors of bidirectional physical and psychological aggression. Younger couples and couples with less than a one-year relationship duration assaulted each other the most. Conclusions: These data provide an objective view of bidirectional aggression in Spanish community samples and serve as a reference point for prevention and intervention programs and forensic reports. Keywords: Prevalence, intimate partner aggression, unidirectional, mutual, bidirectional.

The use of aggressive tactics in intimate relationships to resolve relationship conflicts has become a critical target of research in the social sciences in recent years, as is evident from the large number of epidemiological studies and scientific publications that have used The Conflict Tactics Scale (CTS; Straus, 1979; Straus, Hamby, Boney-McCoy, & Sugarman, 1996), considering physical aggression as a phenomenon of a dyadic or bidirectional nature (Archer, 2000; Capaldi & Langhinrichsen-Rohling, 2012; Kimmel, 2002; Langhinrichsen-Rohling, Selwyn, & Rohling, 2012).

Domestic violence was not a unitary phenomenon, and different types of partner violence were apparent in different contexts, samples, and methodologies (Johnson, 2011). The research in this area argued that it is quite apparent that both men and women use physically aggressive tactics during disagreements, a critical dimension of intimate partner violence (IPV) (Capaldi & Langhinrichsen-Rohling, 2012). According to Johnson and Leone (2005), IPV is a heterogeneous phenomenon because some types of IPV have greater gender symmetry (i.e., situational couple violence) than did others (i.e., coercive controlling violence).

Large-scale surveys research, using community or national samples, reports gender symmetry in the initiation and perpetration by men and women of IPV (for a review, see Desmarais, Reeves, Nicholls, Telford, & Fiebert, 2012; Esquivel-Santoveña & Dixon, 2012). This type of IPV (situational couple violence) is not based on relationship dynamics of coercion and control, is less severe, and mostly arises from conflicts and arguments between the partners. In contrast, in samples obtained primarily from women’s shelters, court mandated programs, police reports, and emergency rooms are more likely to report coercive controlling violence. This type of violence is asymmetric and perpetrated largely by men against their partners; it is characterized by power and control and more often results in injuries to women (Johnson, 2011). According to Kelly and Johnson (2008), situational couple violence is generally
more common than coercive controlling violence and, therefore, dominates the study of violence in large survey samples.

Consequently, recent research highlights the need to consider not only the perpetration and victimization rates but also the patterns of aggression that occur in dyads, with the aim of improving the effectiveness of treatment and prevention programs (Capaldi & Langhinrichsen-Rohling, 2012; Langhinrichsen-Rohling et al., 2012).

Regarding heterosexual couples, several studies characterize unidirectional violence as involving: (a) a male perpetrator and a female victim (male-to-female partner violence or MFPV) or (b) a female perpetrator and a male victim (female-to-male partner violence or FMPV). Unidirectional violence occurs when only one of the couple members is a perpetrator and the other is a victim (José & O’Leary, 2009; Langhinrichsen-Rohling et al., 2012; McKinney & Caetano, 2010). When both of these two patterns are present (MFPV and FMPV), we can further define the situation as mutual, reciprocal, or bidirectional violence, terms that have been used with increasing frequency in studies in which both members of a couple report being perpetrators and victims (Caetano, Ramisetty-Mikler, & Field, 2005; Caetano, Vaeth, & Ramisetty-Mikler, 2008; Langhinrichsen-Rohling et al., 2012; Melander, Noel, & Tyler, 2010).

According to Straus and Douglas (2004), the evaluation of the two partners by the CTS scale allows the estimation of the behavior of both partners (one of the most important contextual variables) and permits determining the mutuality of partner violence, and creating “Dyadic Partners Types” (Male-Only, Female-Only, and Both Violent). Mutual violence occurs when both partners report being perpetrators, and several studies have found that the “Both-Violent” is the most frequently occurring type (Straus, 2012). Several studies use the term bidirectional violence. For the purposes of the present study, the authors retain the terminology used by the researchers cited.

Bidirectional violence occurs when either partner reports both MFPV and FMPV (for a review, see Langhinrichsen-Rohling et al., 2012); in other words, when either partner reports being perpetrator and/or victim. Several studies have divided bidirectional violence into three mutually exclusive categories: (a) perpetrators only (b) victims only, and (c) perpetrators and victims (Caetano et al., 2008; Melander et al., 2010). Finally, reciprocal violence occurs when MFPV and FMPV are both present: both partners report being perpetrators and victims (McKinney & Caetano, 2010).

Research carried out with samples of university students has found evidence of mutual (Straus, 2004; Straus & Ramírez, 2007), reciprocal (Whitaker, Haileyesus, Swahn, & Saltzman, 2007), and bidirectional physical aggression (Straus, 2008). In addition, evidence of mutual (Anderson, 2002), reciprocal (Caetano et al., 2008; Kar & O’Leary 2010), and bidirectional physical aggression (Archer, 2000; Langhinrichsen-Rohling et al., 2012) has been found in larger samples and community samples both of married and cohabiting adult heterosexual couples.

The present study has several objectives: (a) to estimate the prevalence of physical and psychological aggression as assessed with the CTS-2, (b) to analyze dyadic types of aggression, and (c) to analyze the roles played by age and the duration of the relationship in bidirectional physical and psychological aggression in a sample of 3,578 heterosexual couples from the Region of Madrid (Spain).
The research assistants were informed of the general characteristics of the study and that the general goal was to analyze different aspects of daily cohabitation of intimate couple relationships regarding the way they negotiate and resolve conflicts. The purpose of this research was explained to the participants and, as the questionnaire was anonymous, the consent form was introduced in the first part of the protocol, and participants were told that they could give their consent by completing the questionnaire and sending it anonymously and independently of their couple to a PO Box.

The procedure was as follows: (a) each research assistant had to collect a quota of 8 couples from the assigned census area, 1/3 of whom could be acquaintances and the rest unknown; (b) the couples were selected taking into account the following age range: 18-29; 30-50; >50; and (c) after obtaining the study quota, the research assistant had to give the code of each couple member to the director of the project (e.g., 1-a and 1-b up to 8-a and 8-b) and the phone number or email address of each couple.

Table 2 shows the number of research assistants, initial protocols, the rate of return, the rejection rate (the protocols were rejected because they had faulty data, had been completed randomly, or had low response consistency), and the total number of participants for each year. The level of confidence was 95%, and the maximum sampling error was 1.64 for the entire sample.

The missing data were replaced through the Expectation-Maximization (EM) algorithm (SPSS, version 19.0). The prevalence statistics reported in the present study are based on valid cases (i.e., missing data were not replaced prior to computing this statistic, and as no differences were obtained then, they were replaced with imputed values).

Data analysis

Analyses were performed with the statistical package SPSS 19. The chi-square test was used to estimate the relationships between victimization and perpetration of aggression and gender, as well as to analyze specific acts of aggression (using the total sample of participants as a reference). To verify the role played by age and the duration of the relationship in bidirectional aggression, a binary logistic regression analysis (using the Enter method) was conducted.

### Table 1

**Distribution of the research assistants**

<table>
<thead>
<tr>
<th>Year</th>
<th>Capital</th>
<th>North</th>
<th>East</th>
<th>South</th>
<th>West</th>
<th>Not Metropolitan</th>
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<td>2009</td>
<td>81</td>
<td>6</td>
<td>12</td>
<td>27</td>
<td>8</td>
<td>16</td>
</tr>
<tr>
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<td>65</td>
<td>5</td>
<td>10</td>
<td>22</td>
<td>6</td>
<td>12</td>
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<td>2011</td>
<td>48</td>
<td>4</td>
<td>7</td>
<td>17</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>2012</td>
<td>70</td>
<td>6</td>
<td>10</td>
<td>23</td>
<td>7</td>
<td>14</td>
</tr>
</tbody>
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Prevalence of aggression

Psychological aggression presented a higher degree of prevalence than physical aggression in the case of minor acts (Table 3). Analysis of the prevalence rates obtained revealed significant differences in minor (62.0% vs. 59.4%; \( \chi^2 \ (1, N = 7,156) = 4.74, p<.05 \)) and total (63.2% vs. 60.1%; \( \chi^2 \ (1, N = 7,156) = 6.89, p<.001 \)) psychological aggression scales in the case of females. The absence of significant differences in perpetration and victimization in the physical aggression and injury scales, as well as in the rest of the psychological aggression scales, provides an initial idea of the bidirectional nature of psychological and physical partner aggression.

Table 4 displays the specific acts of psychological aggression in men and women that were significant for both perpetrators, as well as the response percentages.

**Dyadic types of intimate partner aggression**

Psychological aggression presented a higher prevalence than physical aggression for the dyadic types of aggression considered, especially for bidirectional aggression (79%). Whereas approximately 90% of the couples reported no physical assault, 4% of the couples reported male to female physical aggression, and 4.5% reported female to male physical aggression. In 4% of the couples, both men and women reported being perpetrators of physical assault (mutual), whereas approximately 19% reported being “perpetrators only” and 19% reported being “victims only”. The prevalence of reciprocal aggression was 3%, and the overall prevalence of bidirectional aggression was approximately 24%. Furthermore, couples most frequently reported a “minor” severity level of aggression. Figure 1 shows the dyadic types of aggression.

Bidirectional aggression, age and duration of relationship

With regard to the duration of the relationship and bidirectional physical aggression, the Hosmer and Lemeshow test (\( \chi^2 \_0^2 = 5.354, p = .069 \)) indicated that there were no statistically significant differences between the observed and predicted classifications, reflecting successful adjustment of the model. The analyses performed indicate that the couples with a shorter relationship duration exerted more bidirectional physical aggression (\( b = -0.374, p = .00 \)). The regression model provided a correct estimate in 76% of the cases (\( \chi^2 \_1^2 = 104.664, p<.01 \)), of which 100% of the total explained percentage corresponds to true negatives.

Regarding bidirectional psychological aggression, the Hosmer and Lemeshow test (\( \chi^2 \_2^2 = 3.504, p = .173 \)) indicated that there were no statistically significant differences between the observed and predicted classifications, reflecting successful adjustment of the model. The analyses performed show that the younger couples exert more bidirectional psychological aggression (\( b = -0.286, p = .00 \)). The regression model provided a correct estimate in 79% of the cases (\( \chi^2 \_3^2 = 63.779, p<.01 \)), of which 100% of the total percentage corresponds to true negatives.

With regard to age and bidirectional physical aggression, the Hosmer and Lemeshow test (\( \chi^2 \_0^2 = 1.744, p=.187 \)) indicated that there were no statistically significant differences between the observed and predicted classifications, reflecting successful adjustment of the model. The analyses performed show that the younger couples exert more bidirectional physical aggression (\( b = -0.794, p = .00 \)). The regression model provided a correct estimate in 77% of the cases (\( \chi^2 \_1^2 = 135.950, p<.01 \)), of which 100% of the total percentage corresponds to true negatives.

Regarding bidirectional psychological aggression, the Hosmer and Lemeshow test (\( \chi^2 \_2^2 = 0.138, p=.711 \)) indicated that there were no statistically significant differences between the observed and predicted classifications, and reflecting successful adjustment of the model. The analyses performed show that the younger couples exert more bidirectional psychological aggression (\( b = -0.657, p<.001 \)) in 79% of the cases (\( \chi^2 \_3^2 = 63.779, p<.01 \)), of which 100% of the total percentage corresponds to true negatives.
present study is lower in comparison with that observed in other report being perpetrators only and victims only (Caetano et al., this study because their prevalence differs from that of those who rates of male perpetration ranging from 4% to 45% and rates of (4%). In small community samples, Desmarais et al. (2012) found aggression was slightly higher (4.5%) than rates of


References


