Prevalence and predictors of sexual aggression in dating relationships of adolescents and young adults

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Dyadic influences among the diverse forms of aggression in dating relationships of adolescents and young adults have been reported in various studies. The goal of this research was to extend a dyadic model of physical aggression against partners to sexual aggression against partners. An urban sample of 4,052 adolescents and young adults of both genders, between 16 and 26 years old, was used. The percentage of male aggressors was significantly higher than that of the females (35.7% vs. 14.9%) and the percentage of victimization was higher for the women (25.1% vs.21.7%). Sexual aggression and sexual victimization was almost solely psychological in nature, that is, verbal coercion. As predicted by the dyadic model of physical aggression in dating relationships, sexual victimization was best predicted by sexual aggression of the individuals in this study both for males and females.

Prevalencia y predictores de la agresión sexual en las relaciones de noviazgo en adolescentes y jóvenes. Son muchos los estudios publicados que analizan las influencias diádicas en las relaciones de noviazgo en adolescentes y jóvenes adultos. El objetivo de este estudio consiste en aplicar el modelo diádico de la agresión física hacia las parejas a la agresión sexual contra las parejas. Se ha utilizado una muestra de 4.052 adolescentes y jóvenes adultos de ambos sexos, con edades comprendidas entre los 16 y los 26 años. El porcentaje de hombres agresores es significativamente superior que el de mujeres (35.7% vs 14,9%), y el porcentaje de víctimas de agresión sexual fue superior para las mujeres (25,1% vs 21,7%). Los resultados muestran que tanto la agresión como la victimización sexual son fundamentalmente de naturaleza psicológica, como, por ejemplo, la utilización de tácticas coercitivas de naturaleza verbal. Tal como predice el modelo diádico de agresión física en las relaciones de noviazgo, la victimización sexual se predice en función de la agresión sexual de los individuos estudiados tanto en el caso de los hombres como en el de las mujeres.

Numerous studies have documented the presence of various types of aggressive behaviors in dating relationships. Psychological aggression is most frequent, followed by physical aggression, and, lastly, sexual aggression (González & Santana, 2001; Hird, 2000; Jackson, Cram, & Seymour, 2000; Katz, Carino, & Hilton, 2002; Malik, Sorensen, & Aneshensel, 1997; Muñoz-Rivas, Graña, O'Leary, & González, 2007a, 2007b). To the surprise of many, the majority of the physical aggression in dating relationships is bidirectional (Lewis & Fremouw, 2001; Malik et al., 1997; O'Leary & Slep, 2003; Swart, Garth, & Ricardo, 2002). Further, contrary to the expectations of some, most aggression by females in dating relationships is not in self-defense (Follingstad, Wright, Lloyd, & Sebastian, 1991; Harned, 2001; Hettrich & O'Leary, 2001).

When analyzing gender differences in dating relationships, males report more victimization from physical aggression by partners than females (Muñoz-Rivas et al., 2007a, 2007b; O'Leary, Slep, Avery-Leaf, & Cascardi, 2008). But in the vast majority of cases there is no physical injury. However, if injury occurs, usually it is more likely to occur for females (Muñoz-Rivas et al., 2007b). Further, the results suggest that males experience more psychological aggression and females experience more sexual aggression from their partners (Foshee, 1996; Harned, 2001; Hird, 2003).

In many countries, obtaining family or institutional permission to ask adolescents about their sexual behavior is complex and difficult. Consequently, there are few studies of sexual aggression and victimization in dating relationships of high school students. Given the small number of studies that have assessed sexual aggression in late adolescence and young adulthood, some may conclude that females in dating relationships are the primary victims of sexual aggression, in comparison to males (Fernández & Fuertes, 2005; Harned, 2001; Hird, 2000; Malik et al., 1997; Silverman, Raj, Mucci, & Hathaway, 2001; Spencer & Bryant, 2000). However, prevalence data about sexual aggression in dating relationships in the U.S. reveal that broad range of estimates of sexual aggression make conclusions premature (Hickman, Jaycox, & Aronoff, 2004). As Hickman et al. (2004) noted in their review of prevalence data, sexual violence perpetration among boys ranged from 3% to 37% and for girls it ranged from 2% to 24%.

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Sexual victimization estimates ranged from 14% to 43% for girls and 0.3% and 36% for boys (CDC, 2003; Molidor & Tolman, 2000; Wolfe, Scott, Reitzel-Jaffe, Wekerle, Grasley, & Pittman, 2001). In order to allow more accurate conclusions to be drawn from prevalence studies on sexual aggression and victimization, it is important to have the following (1) a report of the specific questions asked of respondents; (2) a portrayal of the representativness of the sample of high school and/or other young adults; (3) a report of the percentage of the individuals contacted who actually completed the assessment, i.e., the response rate; and (4) a specification of whether the sexual aggression was from a current or past partner. Because of differences on these variables across studies, we affirm the conclusion of Hickman et al. (2004), that it is now difficult if not impossible to depict the actual prevalence of sexual aggression and victimization.

There are several complex explanatory models of the nature. development, and maintenance of physical aggression in dating aggression (Capaldi, Shortt, & Kim, 2006; O'Leary & Slep, 2003). These models portray partner aggression as a result of family of origin, personal, and relationship variables. Our focus herein is on the interplay between individual and partner verbal, physical, and sexual behavior, and we attempt to apply the dyadic model of physical aggression against a partner and extend it to sexual aggression against a partner. Many studies have repeatedly found that physical aggression of one partner is highly correlated with physical aggression of the other partner and that psychological aggression of the individual is highly related to the physical aggression of the individual (Lewis & Fremouw, 2001; O'Leary, 2005; O'Leary & Slep, 2003; Orcutt, García, & Pickett, 2005; Wolfe et al., 2001). There are a few multifactor models of sexual aggression by male college students in dating relationships that involve a constellation of individual factors (Malmuth, 1986) such as acceptance of interpersonal violence, hostility toward women, dominance as a sexual motive, and sexual experiences. Malmuth (1986) found that a combination of the aforementioned factors on which subjects scored above the median provided evidence for a synergistic process whereby the combination of several factors yielded higher levels of sexual aggression than would be expected by the additive combination of them.

This research has several goals: (1) to assess the prevalence of sexual aggression and victimization in dating relationships of adolescents and young adults in a representative urban Spanish population; (2) to evaluate sex and age differences in sexual aggression and victimization; (3) to extend the dyadic model of physical aggression against a partner (O'Leary & Slep, 2003) to sexual aggression against a partner, and (4) to evaluate parameters of the relationship such as emotional relation, duration, and contact frequency as predictors of sexual aggression.

Method

Participants

As a function of the study goals, the following inclusion and exclusion criteria were proposed:

- Inclusion criteria: a) between 16 and 26 years old, and b) being currently in a heterosexual dating relationship.
- Exclusion criteria: not in a dating relationship or being married.

The sample was obtained using the following two step procedure:

- a) A random selection was made of a pool 36 high schools from different areas of the Community of Madrid and, of those, 20 agreed to participate in the present study. All students who participated were completing studies of: a) 4th course of Compulsory Secondary Education, b) the last two years of high school, and c) Professional Training (studies oriented towards practical trades).
 - Of those schools that accepted to participate, human subjects' approval was obtained by asking permission from school administrators after informing them of the study objectives, and the same was done with the Association of Student's Parents (APA). Once permission was granted, students completed the assessment. Completion of the assessment was voluntary and confidential, and less than 1% of the students refused to complete the questionnaire.
 - With this method, the total sample was 3,151 adolescents and young adults; of those 1,541 were currently dating. This sample was composed primarily of individuals who were 16-19 years old.
- b) In order to obtain a sample of individuals who were post high school, the «snowball» technique, in which each of 268 psychology students from the last licentiate courses from three public and private universities of the Community of Madrid, as part of their research practicum, administered the assessment instruments to 8 individuals who were dating from their environment, either family members, friends, or acquaintances, after obtaining their consent and voluntary participation. After completing the questionnaires anonymously, the participants sent in their responses in a closed envelope to the research team. With this method, the total sample was composed of 3,327 adolescents and young adults and of those 2,511 were currently dating. This later sample was composed primarily of individuals who were 20-26 years old.

The final sample was made up of a total of 4,052 individuals who were currently dating; they were between 16 and 26 years old. Because there were no differences between the levels of sexual aggression of the two samples at the different ages, the high school and post high school groups were combined and treated as one sample for further analyses.

Measures

For this study, a specific assessment instrument with different formats was developed:

- a) A series of questions with various response options that assessed relevant information concerning:
 - Demographics: e,g., age, sex, nationality, educational center.
 - Dating relationship variables, e.g., age at the first relationship, number of boyfriends/girlfriends, duration of current relationship, frequency of contact; and perception of current relationship's future).
- b) The Modified Conflict Tactics Scale (MCTS) (Neidig, 1986).

The modified version of the Conflict Tactics Scale (CTS) (Straus, 1979) was validated in two studies (Cascardi, Avery-Leaf, & O'Brien, 1998; Cascardi, Avery-Leaf, O'Leary, & Slep, 1999) supporting 2-factor models for males and females: psychological and physical aggression. The Spanish version showed a 4-factor models for males and females: negotiation, verbal/psychological aggression, minor physical aggression and severe physical aggression (Muñoz-Rivas, Andreu, Graña, O'Leary, & González, 2007). It is made up of 18 items, with bidirectional questions (victim/aggressor), and a 5-point Likert-type response format, with frequencies ranging from 1 (never) to 5 (very frequently).

- c) The Dominating and Jealous Tactics Scale (Kasian & Painter, 1992).
 - This scale is made up of 11 five-point Likert-type items, ranging from 1 (*never*) to 5 (*very frequently*). It is structured in two subscales that measure dominant tactics (e.g., «I have tried to prevent my partner from talking to or seeing his/her family») and jealous behavior (e.g., «I have been jealous of my partner. I have suspected my partner's friends»).
- d) Appraisal of sexual aggression in adolescents and young adults.
 - This 5-item scale with a Likert-type response format, ranging from 1 (*never*) to 5 (*very frequently*), was elaborated by the authors in order to measure the presence of the most common sexually aggressive behaviors, especially those referring to pressure and coercion to engage in nonconsensual sexual relations (see items in Table 2). Cronbach's Alpha for sexual perpetration for females was .73 and for sexual victimization was .72; for males, alpha was .73 for perpetration and .68 for victimization.
- e) The statistical analyses were descriptive statistics and χ^2 , for the demographic and relationship part of the study; for the prediction of sexual aggression, a forward logistic regression analysis was used with SPSS, v.15.

Results

Descriptive characteristics of the sample

The sample for the research reported herein was composed of 4,052 individuals of both sexes (54.3% females and 45.7% males), between 16 and 26 years, mean age 20.6 years (SD= 2.95). (Probably should give the mean age and SD separately for males and females unless it appears elsewhere in a table). Full-time students who did not hold any job comprised 64.8% of the sample, 20.8% studied and worked at the same time, and 14.4% worked exclusively.

Their mean age at the time of their first dating relationship was approximately 14.9 years, with the female's age being significantly lower than the male's when they started to date (14.91 vs.15.08 years, for females and males, respectively, $t_{(4050)}$ = 2.23, p<.02), and the males stated they had had a higher number of dating relationships in comparison with the females (3.95 vs. 3.59, $t_{(4050)}$ = 3.76, p<.001).

Concerning the duration of these relationships, the mean was 29.01 months (SD=23.37), with the females maintaining their dating relationships for longer periods of time (30.6 vs. 27.3 months, for females and males, respectively, $t_{(4029)}=4.95$, p<.000). The most relevant data of these relationships are displayed in

Table 1. As seen in Table 1, of the whole sample, approximately 39% of the members of both sexes classified their current relationship as stable and/or serious. Approximately 46% usually saw their partner several times a week and/or every day, and almost 57% foresaw a continuity of the relationship in the near future.

Sexual aggression a function of gender

It is important to stress that, on average, the males were dating females who were younger than themselves, and the females were dating males older than themselves. Thus, we present data for female's victimization and their aggression, and male's aggression and their victimization, rather than emphasizing and contrasting male's aggression and female's aggression and male's victimization and female's victimization.

As seen in Table 2, the percentage of male aggressors was significantly higher than that of the females when observing the global indexes of sexual aggression, 35.7% versus 14.9% for males and females respectively [$\chi^2(1)$ = 235.32, p<.001]. The highest percentages of victimization were obtained for the females, in the global indexes of sexual victimization, 25.1% versus 21.1.7% for females and males respectively [$\chi^2(1)$ = 8.90, p<.001].

The data reveal that the most common sexually aggressive behavior of both sexes was to verbally insist on engaging in sexual relations despite the fact that the partner did not wish to. When assessing this specific item regarding insisting on sex, the percentage of male perpetrators was higher than that of the females [31.9% versus 13.5%, $\chi^2(1)$ = 199.02, p<.001].

Focusing on the analysis of the sample's responses, in Table 2 one can see that the percentage of males who acknowledged being

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	Women (n= 2202)	Men (1850)	χ^2
Type of current relationship			
New	10,9	13,7	
Casual	9.6	9.0	
Stable	33,6	36,0	13,05***
Serious/formal engagement	45,9	41,4	,
Contact frequency			
Less than once a month	2,0	1,6	
Once a month	5,4	3,4	
Weekly contact	47,0	48,4	10,48**
Daily contact	45,6	46,6	
Duration of current relationship			
Up to 1 year	40,6	44,2	
Between 1 and 2 years	20,0	21,5	11,44**
Between 2 and 3 years	14,1	12,6	
More than 3 years	25,3	21,6	
Future of the current relationship			
We will get married	34,6	31,8	
We will stay together	56,2	58,4	n.s.
We will break up	9,2	9,8	

aggressors was significantly higher than that of the females who admitted being victims for three of the behaviors analyzed: a) threatening to end the dating relationship if the partner did not agree to engage in sexual relations; b) verbally insisting on engaging in sexual relations despite the fact that the partner did not wish to; c) using alcohol/drugs to put an end to the partner's resistance to engage in sexual relations, Overall males reported perpetrating sexual aggression more than they reported being sexually victimized, 35.7% versus 21.1%.

In contrast, females acknowledge having been victims of sexually aggressive behaviors by their boyfriends (25.1%) more than they reported being sexually aggressive toward their boyfriends (14.9%). Differences in sexual victimization versus victimization occurred on the following specific behaviors: (a) repeated insistence by their partners to engage in sexual relations despite their not wanting to; and b) grabbing or holding down the partner to engage in nonconsensual sexual relations.

Prediction of Sexual Aggression

In this section, multiple logistic regression analysis was performed with a forward stepwise method to extract the best predictors of sexual aggression. The final model variables are presented in Table 3, with the statistically significant odds ratios (95% confidence) highlighted in bold. Two regression models were conducted for males and females and, in both cases we included as predictors of sexual aggression two types of variables related to: a) the presence of other types of aggression and victimization within the dating relationship: verbal aggression, verbal victimization, physical aggression, physical victimization, dominant tactics, dominant tactics victimization, jealous tactics, jealous tactics victimization; b) Individual variables: Age (between 16 and 26 years old); c) Aspects related to previous and to the current dating relationship: Age at which the individual had his or her first dating relationship (less than 12, 13, 14, 15, 16-17)

years, and older than 18 years), type of current relation (new, casual, stable and serious/formal engagement), duration of the current dating relationship (up to 1 year, 2 years, 3 years, more than 3 years), contact frequency with the current partner (less than once a month, once a month, every week, daily), future of the current relationship (marriage, continue the relationship, break up the relationship).

Prediction of perpetration sexual aggression

The models of prediction of sexual aggression both for males and for females are presented in Table 3. In the case of the males and females, the model includes variables from three categories: (1) psychological, physical, and sexual aggression and victimization; (2) age; (3) characteristics of the relationship, namely, type of relationship, frequency of contact, perceived future of relationship. The percentage of cases being classified correctly with the final models for sexual aggression was 79.3% for males and 87.1% for females; in the regression models for sexual victimization the percentage was 82.0% for males and 83.0% for female. In Table 3 the variables included in the final regression model are presented with the forward method in bold.

Firstly, it can be observed that if the male is in a dating relation in which there are other types of aggression and victimization, the likelihood of sexual assault increases. Thus, the data show that the variables that best predict sexual aggression in the male sample are being a victim of the same kind of aggression. Also, other kinds of aggression such as dominant tactics and jealous tactics increased the probability of the males sexually assaulting their female partners. Age was also a significant individual predictor of sexual aggression perpetrated by males showing that the probability is higher as they become older.

Regarding the variables related to the characteristics of past or current dating relationships, the significant predictors of sexual

Men (n= 1850)			
	Aggressors	Victims	χ^2
Threatening to break up if the partner refuses to engage in sexual relations	7,7	3,8	23,67***
Verbally insisting on engaging in sexual relations even though the partner does not want to	31,9	18,3	58,35***
Use of alcohol/drugs to prevent the partner's resistance to engage in sexual relations	6,6	4,1	5,36*
Threatening to use physical force (i.e., holding down, shoving) if the partner refuses to engage in sexual relations	1,7	1,6	n.s.
Grabbing or holding down the partner to engage in nonconsensual sexual relations	1,8	1,2	n.s.
Any sexual aggression	35,7	21,1	54,93***
Women (n= 2202)			
Threatening to break up if the partner refuses to engage in sexual relations	3,7	3,5	n.s.
Verbally insisting on engaging in sexual relations even though the partner does not want to	13,5	23,8	55,57***
Use of alcohol/drugs to prevent the partner's resistance to engage in sexual relations	2,5	2,4	n.s.
Threatening to use physical force (i.e., holding down, shoving) if the partner refuses to engage in sexual relations	1,1	1,8	n.s.
Grabbing or holding down the partner to engage in nonconsensual sexual relations	0,8	1,8	6,21*
Any sexual aggression	14,9	25,1	47,24***

aggression in males referred to the age at which they started to date. The data showed that males who are 16-17 years old or 18 or more years are more likely to be sexually aggressive comparing with younger males, less than 15 years old. For men the probability of being sexually aggressive also increased when the relationship lasted more than 3 years.

In the case of the females, as in the case of the males, the likelihood of a female displaying sexually aggressive behaviors in her dating relationship was 3.24 times higher if she were sexually victimized.

Prediction of victimization of sexual aggression

In both sexes, as shown in Table 3, the likelihood of becoming a victim of sexual aggression again increased in the case of also being a sexual aggressor (1.90 times more likely for males and 4.34 times for females) and being a victim of other kinds of aggression (i.e., jealous and dominant tactics, physical aggression and verbal aggression). For females the probability of being a victim of sexual abuse increased either when females plan to continue the relationship or when they plan to break up, the odds ratios of 1.39 and 1.63, respectively.

Discussion

The results obtained in the present study show that sexual aggression, like other types of aggression, is present in dating relationships of adolescents and young adults in Spain. Approximately 35% of males and 14% of females reported that they engaged in some form of sexually aggressive behavior against their partner. Overall, these results are consistent with studies that have shown that sexual victimization is higher among females (Cascardi et al., 1999; CDC, 2003; Foshee, Benefield, Ennett, Bauman, & Suchindran, 2004). However, these data herein showed that the use of physical force to engage in sexual behavior was very low for males and extremely low for females. If sexual aggression occurred, it was almost solely psychological

The regression models provide results that seem especially relevant for prevention. Older males and females were more likely to attempt to coerce their partners into engaging in sexual relations. Additional risk factors for males and females were: a) being a victim of sexually aggressive behaviors by one's partner and, b) the presence of other kinds of aggression, especially those that involve various kinds of attempts to control the other member

Table 3 Odds of sexual aggression and victimization in adolecents and young adults ^a					
	Men (n= 1850)		Women (n= 2202)		
	Perpetration (95% CI)	Victimization (95% CI)	Perpetration (95% CI)	Victimization (95% CI)	
Sexual aggression	-	1.90 (1.71-2.10)	-	4.34 (3.45-5.39)	
Sexual victimization	8.84 (6.60-11.83)	_	3.24 (2.76-3.81)	_	
Verbal aggression	1.01 (0.95-1.07)	.91 (.8595)	1.06 (.99-1.13)	1.03 (.98-1.09)	
Verbal victimization	1.07 (1.03-1.11)	1.11 (1.05-1.17)	.95 (.89-1.03)	1.16 (1.12- 1.21)	
Physical aggression	1.13 (0.98-1.30)	1.10 (1.04-1.17)	1.31 (1.19-1.46)	.88 (.7998)	
Physical victimization	0.86 (0.76-0.98)	1.14 (1.05-1.23)	.69 (.6178)	1.22 (1.07-1.39)	
Dominant tactics	1.11 (1.00-1.23)	1.03 (.89-1.19)	1.17 (1.05-1.31)	1.01 (.88-1.15)	
Dominants tactics victimization	1.00 (0.87-1.14)	1.18 (1.06-1.31)	1.03 (.88-1.21)	1.18 (1.07-1.31)	
Jealous tactics	1.47 (1.32-1.64)	.98 (.85-1.12)	1.26 (1.26-1.73)	()	
Jealous tactics victimization	0.88 (0.78-1.01)	1.34 (1.19-1.52)	.81 (.6995)	1.18 (1.05-1.32)	
Age	1.14 (1.09-1.20)	1.06 (1.00-1.12)	1.11 (1.05-1.16)	1.14 (1.09-1.19)	
Age first relationship	1.14 (1.05-1.20)	1.00 (1.00-1.12)	1.11 (1.05-1.10)	1.14 (1.05-1.15)	
16-17 years	1.63 (1.65-2.30)	.93 (.63-1.38)	.68 (.44-1.07)	.68 (.46-1.00)	
More 18 years	1.51 (1.03-2.21)	1.33 (.88-1.02)	.62 (.3899)	.69 (.46-1.04)	
Type of current relationship					
Casual	1.94 (1.18-3.19)	1.19 (.70-2.02)	.75 (.40-1.40)	.88 (.53-1.49)	
Stable	1.73 (1.04-2.88)	1.73 (1.02-2.90)	.50 (.2697)	1.17 (.73-1.89)	
Serious	1.43 (1.04-1.97)	.96 (.67-1.36)	.90 (.62-1.31)	1.30 (.96-1.76)	
Contact frequency					
Once a month	0.49 (0.33-0.73)	1.27 (.81-1.99)	1.07 (.69-1.65)	.84 (.59-1.20)	
Every week	0.68 (0.47-0.98)	1.19 (.78-1.81)	.99 (.64-1.56)	.69 (.47-1.00)	
Daily	0.72 (0.47-1.08)	1.50 (.95-2.36)	1.17 (.75-1.84)	1.10 (.76-1.60)	
Future of current relationship					
Continue relationship	.65 (.4985)	1.36 (.78-2.37)	.79 (.44-1.41)	1.39 (1.07-1.81)	
Break up	0.95 (0.58-1.56)	1.56 (.97-2.50)	.71 (.43-1.17)	1.63 (1.07-2.48)	
Duration of the current relationship					
Up to two years	0.22 (0.14-1.56)	.61 (.17-2.17)	.85 (.26-2.79)	.91 (.35-2.36)	
Up to three years	1.30 (0.66-2.56)	.79 (.36-1.70)	.55 (.26-1.16)	1.40 (.83-2.38)	
More to three years	1.43 (1.11-1.84)	.69 (.5292)	1.06 (.78-1.44)	1.08 (.84-1.40)	

(Follingstad, Bradley, Helff, & Laughlin, 2002). Both males and females who are sexually aggressive engage in jealous behaviors, and they were more likely to use dominant (controlling) tactics. In addition, females who reported that they engaged in sexual aggression against their partners also more likely to report that they engaged in physical aggression against their partners. Overall, the data strongly support the need to consider dyadic factors in the prediction of sexual aggression, but they also document that individual characteristics of males and females are of some value as well in predicting sexual aggression.

While there were significant correlations across psychological, physical, and sexual aggression (i.e., ranging from .70 to .50 for both males and females), the absolute size of the correlations between sexual aggression of males and verbal aggression was relatively small, i.e., .25. However, the correlation of sexual aggression and physical aggression was higher, i.e., .45. For females, the absolute size of the correlation of sexual aggression with both verbal and physical aggression was small, i.e., .21 and .22, respectively. In summary, there was stronger association

between verbal and physical aggression than between sexual aggression and either verbal or physical aggression.

This study is one of the first to document the prevalence of sexual aggression in current dating relationships of adolescents and young adults in Spain. Both male and female respondents in this research admitted to considerable levels of psychological, physical, and sexual aggression (Muñoz-Rivas et al., 2007a, 2007b). However, as noted earlier, almost all of the sexual aggression reported by males and females was about verbal coercion to engage in sexual behavior. As was the case in a study in Canada (Wolfe et al., 2001), few males and very few females reported that their partners used physical force to pressure them into sexual acts.

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References

- Cascardi, M., Avery-Leaf, S., O'Leary, K.D., & Slep, A.M. (1999). Factor structure and convergent validity of the Conflict Tactics Scale in high school students. *Psychological Assessment*, 11, 546-555.
- Capaldi, D.M., Shortt, J.W., & Kim, H.K. (2006). A life span developmental systems perspective on aggression toward a partner. In W.M. Pinsof. & J.L. Lebow (Eds.): Family psychology (pp. 141-168). New York: Oxford.
- CDC (2003). National Center of Injury Prevention and Control. Sexual violence: Fact Sheet [Online]. Avaible at: http://www.cdc.gov/ncipc/ factsheets/svfacts.htm.
- Follingstad, D.R., Rutledge, L.L., McNeill-Hawkins, K., & Polek, D.S. (1992). Factors related to physical violence in dating relationships. In E.C. Viano (Eds.): *Intimate violence: Interdisciplinary perspectives* (pp. 121-135). Washington, DC: Hemisphere.
- González, R., & Santana, J.D. (2001). La violencia en parejas jóvenes. *Psicothema*, 13(1), 127-131.
- Fernández, A.A., & Fuertes, A. (2005). Violencia sexual en las relaciones de pareja de los jóvenes. *Sexología Integral*, 2(3), 126-132.
- Follingstad, D.R., Bradley, R.G., Helff, C.M., & Laughlin, J.E. (2002). A model for predicting dating violence: Anxious attachment, angry temperament and need for relationship control. *Violence and Victims*, 17(1), 35-47.
- Follingstad, D.R., Wright, S., & Sebastian, J.A. (1991). Sex differences in motivations and effects in dating violence. Family Relations, 40, 51-57
- Foshee, V.A. (1996). Gender differences in adolescent dating abuse prevalence, types and injuries. *Health Education Research*, 11, 275-286.
- Foshee, V.A., Benefield, T.S., Ennett, S.T., Bauman, K.E., & Suchindran, C. (2004). Longitudinal predictors of serious physical and sexual dating violence victimizacion during adolescence. *Preventive Medicine*, 39, 1007-1016.
- Harned, M.S. (2001). Abused women or abused men? An examination of the context and outcomes of dating violence. *Violence and Victims*, 16(3), 269-85.
- Hettrich, E.L., & O'Leary, K.D. (2007). Females' Reasons for their physical aggression in dating relationships. Journal of Interpersonal Violence, 22, 1131-1143.
- Hird, M.J. (2000). An empirical study of adolescent dating aggression in the U.K. *Journal of Adolescence*, 23, 69-78.
- Hickman, L.A., Jaycox, L.H., & Aronoff, J. (2004). Dating violence among adolescents: Prevalence, gender distribution and prevention program effectiveness. *Trauma Violence Abuse*, 5(2), 123-142.

- Jackson, S.M., Cram, F., & Seymour, F.W. (2000). Violence and sexual coercion in high school students' dating relationships. *Journal of Family Violence*, 15, 23-36.
- Katz, J., Carino, A., & Hilton, A. (2002). Perceived verbal conflict behaviors associated with physical agresión and secual coercion in dating relationships: A gender-sensitive analysis. *Violence and Victims*, 17(1), 93-109.
- Kasian, M., & Painter, S.L. (1992). Frequency and severity of psychological abuse in a dating population. *Journal of Interpersonal Violence*, 7, 350-364.
- Lewis, S.F., & Fremouw, W. (2001). Dating violence. A critical review of the literature. *Clinical Psychology Review*, 21(1), 105-127.
- Malik, S., Sorenson, S.B., & Aneshensel, C.S. (1997). Community and dating violence among adolescents: Perpetration and victimization. *Journal of Adolescent Health*, 21(5), 291-302.
- Malmuth, N.M. (1986). Predictors of naturalistic sexual aggression. *Journal Personality and Social Psychology*, 50, 953-962.
- Molidor, C., & Tolman, R. (1998). Gender and contextual factors in adolescent dating violence. *Violence Against Women, 4,* 180-194.
- Muñoz-Rivas, M.J., Andreu, J.M., Graña, J.L., O'Leary, K.D., & González, P. (2007). Validation of the modified version of the Conflicts Tactics Scale (M-CTS) in Spanish population of youths. *Psicothema*, 19(4), 692-697.
- Muñoz-Rivas, M.J., Graña, J.L., O'Leary, K.D., & González, M.P. (2007a). Physical and psychological aggression in dating relationships in Spanish university students. *Psicothema*, 19(1), 102-107.
- Muñoz-Rivas, M.J., Graña, J.L., O'Leary, K.D., & González, M.P. (2007b). Aggression in adolescent dating relationships: Prevalence, justification and health consequences. *Journal of Adolescent Health*, 40, 298-304.
- Neidig, P.M. (1986). *The Modified Conflict Tactics Scale*. Beaufort, SC: Behavioral Sciences Associates.
- O'Leary, K.D. (2005). Análisis y prevención de la violencia en las relaciones de noviazgo en jóvenes. Seminario Internacional sobre Agresión y Violencia en Psicología Clínica: perspectivas actuales. Madrid, España.
- O'Leary, K.D., & Slep, A.M. (2003). A dyadic longitudinal model of adolescent dating aggression. *Journal of Clinical Child and Adolescent Psychology*, 32(3), 314-327.
- O'Leary, K.D., Slep, A.M., Avery-Leaf, S., & Cascardi, M. (2008). Gender differences in dating aggression and victimization among multiethnic high school students. *Journal Adolescent Health* (pages to be determined).

- Orcutt, H.K., García, M., & Pickett, S.M. (2005). Female-perpetrated intimate partner violence and romantic attachment style in a college student sample. *Violence and Victims*, 20(3), 287-302.
- Silverman, J.G., Raj. A., Mucci, L.A., & Hathaway, J.E. (2001). Dating violence against adolescent firls and associated substance use, unhealthy weight control, sexual risk behavior, pregnancy and suicidality. *Journal* of the American Medical Association, 286(5), 572-579.
- Spencer, G.A., & Bryant, S.A. (2000). Dating violence: A comparison of rural, suburban and urban teens. *Journal of Adolescent Health*, 27(5), 302-305
- Straus, M.A. (1979). Measuring intrafamily conflict and aggression: The Conflict Tactics Scale (CTS). *Journal of Marriage and the Family*, 41, 75-88
- Swart, L.A., Garth, M.S., & Ricardo, I. (2002). Violence in adolescents' romantic relationships: Findings from a survey amongst school-going youth in a South African community. *Journal of Adolescence*, 25, 385-395.
- Wolfe, D.A., Scott, K., Reitzel-Jaffe, D., Wekerle, C., Grasley, C., & Pittman, A.L. (2001). Development and validation of the conflict in adolescent dating relationships inventory. *Psychological Assessment*, 13, 277-293.