FAMILY AND INTIMATE PARTNER VIOLENCE
AMONG PUERTO RICAN UNIVERSITY STUDENTS

VIOLENCIA FAMILIAR Y DE PAREJA EN
ESTUDIANTES UNIVERSITARIOS PUERTORRIQUEÑOS

Recibido: 3 de julio de 2018 | Aceptado: 24 de mayo de 2019

Ángel Villafañe-Santiago 1, José Serra-Taylor 1, María I. Jiménez-Chafey 1, Carol Y. Irizarry-Robles 1

1 Universidad de Puerto Rico, Recinto de Río Piedras, San Juan, Puerto Rico.

RESUMEN
Aunque la transmisión intergeneracional de la violencia ha sido ampliamente estudiada en Estados Unidos y otros países, este problema no ha sido estudiado en Puerto Rico con una muestra grande. Se buscó explorar y comparar la prevalencia y la relación entre la violencia familiar y la violencia de pareja entre estudiantes universitarios puertorriqueños. La muestra por conveniencia consistió de 3,951 estudiantes universitarios quienes completaron el Cuestionario de Experiencias de Violencia en las Relaciones de Pareja y Familia en Estudiantes Universitarios (Villafañe-Santiago, Jiménez-Chafey, De Jesús, & Vázquez, 2012) y datos sociodemográficos. Los análisis incluyeron frecuencias, media aritmética, pruebas t y Coeficientes de Correlación de Pearson y Regresión Múltiple. La violencia psicológica fue la más frecuente. Los hombres recibieron más violencia física durante su crianza que las mujeres. En las relaciones de pareja, las mujeres ejercieron más conducta controladora, violencia verbal y amenazas, mientras que los hombres ejercieron más violencia física. La correlación y el análisis de regresión apoyan la teoría de transmisión intergeneracional de la violencia para esta población. Los resultados sugieren que la violencia es un problema frecuente en esta población y que la violencia experimentada durante la crianza está significativamente relacionada con la violencia en las relaciones subsiguientes.

PALABRAS CLAVE: Estudiantes universitarios, transmisión intergeneracional de la violencia, violencia de pareja, violencia familiar

ABSTRACT
While the intergenerational transmission of violence has been widely studied in the United States and other countries, this problem has not been studied with a large sample in Puerto Rico. We aim to explore and compare the prevalence and relationship between family and intimate partner violence among Puerto Rican university students. The convenience sample consisted of 3,951 students from the eleven campuses of the University of Puerto Rico who completed the Experiences of Violence in Couple and Family Relations in University Students Questionnaire (Villafañe-Santiago, Jiménez-Chafey, De Jesús, & Vázquez, 2012) and a sociodemographic questionnaire. Analysis included frequencies, arithmetic mean, t tests, the Pearson Correlation Coefficient and Multiple Regression Coefficients. Psychological violence was the most frequent form of violence. Men received more physical violence during their upbringing than women. In intimate relationships, women exerted more controlling behavior, verbal violence and threats, while men exerted more physical violence. Correlation and regression analysis support the intergenerational transmission of violence theory for this population. Results suggest that violence is a frequent problem in this population and that violence experienced during upbringing is significantly related to violence in subsequent relationships.

KEYWORDS: Family violence, intergenerational transmission of violence, intimate partner violence, university students.

For correspondence, please contact carol.irizarry@upr.edu
Intimate partner violence (IPV) is widespread in Puerto Rico (PR). When comparing PR with Los Angeles (LA), a city with about the same population, in 2014 the average number of IPV cases in LA were 11,000, while the average for PR was nearly 15,100 from 2009 to 2014 (López & Arreola, 2014; Women's Advocate Office, 2016). Reports have underscored the fact that Puerto Rico's rates for intimate partner homicides of women are much higher than rates in the United States (U.S.). According to the American Civil Liberties Union (2012), Puerto Rico's rate has been reported to be six times higher than LA. In addition, PR has been placed among the countries with the highest per capita rate in America of women over 14 years of age killed by their partners (Esplugues-Marmolejo, Iborra-Esteve, García-Sánchez, & Martínez, 2010). The high rates reported in PR suggest the urgent need to conduct studies to help assess and prevent this problem.

A recent review pointed out that most reviewed studies have been conducted in the United States and there is little information on the association between child exposure to IPV and IPV perpetration in adulthood among individuals living in low-to-middle-income countries (Kimber, Adham, Gill, Tavish, & MacMillan, 2018). Although IPV has been widely studied in the U.S. college population, there are no studies with a large sample of the Puerto Rican college population. This study aims to fill that gap. Studies not conducted in PR have shown there is a high rate of dating violence in university and college students (Cale, Tzoumakis, Leclerc, & Breckenridge, 2017; Forke & Myers, 2008; Straus, 2004). Overall, emotional violence is the most frequent form of violence in college students' dating relationships (Forke & Myers, 2008; Gover, Kaukinen, & Fox, 2008; Muñoz-Rivas, Graña, O'Leary, & González, 2007; Vázquez, Torres, Otero, Blanco, & López, 2010). In terms of sex, women are more likely to be victims, and have a higher probability of being victims of more than one type of violence, and being assaulted more than once in their dating relationships (Cramer et al., 2017; Forke & Myers, 2008; Smith, White, & Holland, 2003).

Experiences of abuse in intimate relationships are associated with psychological distress, greater levels of anxiety and depression, post-traumatic stress, feelings of anger, hostility, somatization, and greater suicide risk, among others (Black, 2011; Rivera-Rivera, Allen, Rodríguez-Ortega, Chávez-Ayala, & Lazcano-Ponce, 2006). In terms of physical health, women who have been victims present a greater number of health problems such as lesions, chronic pain, digestive problems, and sexually transmitted diseases (Black, 2011). Students who have suffered IPV experience cognitive impairment, lower self-esteem (Shorey, Cornelius, & Bell, 2008; Straith, Harper, & Arias, 2003) and lower academic performance (Rivera-Rivera et al., 2006), thus the importance of studying this issue in the student population. In addition, as university students are likely to become parents, it is important to study this issue and conduct early interventions to prevent the intergenerational transmission of violence.

One of the main predictors of future violent behavior is having a history of violence. A meta-analysis of 30 studies shows that growing up in a home with violence is significantly associated with domestic violence in adulthood (Stith et al., 2000). Men who suffer childhood abuse are more likely to be aggressors and victims in their romantic relationships (Gover et al., 2008; Milletich, Kelley, Doane & Pearson, 2010; Murshid & Murshid, 2018), and those who witnessed father-to-mother violence are more likely to report perpetrating physical abuse and endorse attitudes that justify the abuse (Islam et al., 2017). Women who observed conflict between their parents are more likely to be victims (Gover et al., 2008; Thompson et al., 2006) or perpetrators of IPV (Milletich et al., 2010), and are at least 50% more likely to be either a victim, a perpetrator, or in a bidirectional violent relationship (Palmetto, Davidson, Breitbart, & Rickert, 2013). Women who suffered childhood abuse are also at greater risk of perpetrating physical and psychological abuse in their relationships (Milletich et al., 2010), and of experiencing
physical, sexual or psychological abuse in adulthood (Cale et al., 2017; Gover et al., 2008; Thompson et al., 2006; Vázquez, Torres, Otero, Blanco, & López, 2010). Some college women minimize the aggression and normalize abuse to such an extent that they stay in an abusive relationship (Katz, Tirone & Schukraft, 2012).

While the association between having experienced violence in the family of origin and IPV has been widely studied in the U.S. and other countries, this is the first study in PR that explores this issue with a large sample of university students. The main objectives of this study are: 1) describe the prevalence of violence in the family of origin and intimate partner relationships in a sample of students of the University of Puerto Rico (UPR); 2) explore the relationship between family-of-origin violence and IPV as experienced by Puerto Rican university students; and 3) compare experiences of violence by sex. The main hypotheses state that having experienced family-of-origin violence is a significant factor in IPV among Puerto Rican university students; and differences by sex in experiences of violence will be found.

METHOD

Participants

A convenience sample of 3,951 students from the eleven campuses of the UPR participated in the study. Most were women (65%). Fifty-eight percent of the sample consisted of students between 16 and 20 years old, 35% between 21 and 25 years old, and 7% were older than 25 years. Most participants (76%) grew up with both parents, while the others grew up either with their mother and stepfather (10%), mother only (7%), grandparents (4%), or other (3%). In terms of relationships, 91% of students had been in an intimate partner relationship in their lifetime and 56% were involved in a relationship when they completed the questionnaire.

Instruments

The following information was collected using a socio-demographic questionnaire: age, sex, college year, family composition while growing up, intimate partner relationships (lifetime), ongoing relationship, and sexual orientation. The self-report Experiences Questionnaire on Violence in Couple and Family Relations in University Students (Villafañe-Santiago et al., 2012) was used to collect information regarding experiences of violence. This scale consists of 41 items that measure experiences of violence in the family of origin (witnessed between parents and received from parents) and intimate partner relationships (as victim and perpetrator) and which can be responded to with “yes” or “no” (α = .89). To facilitate comprehension, subscales will be displayed as follows: 1) Received from partner; 2) Perpetrated against partner; 3) Witnessed between parents; and 4) Received from parents. Each sub-scale included items exploring different expressions of physical and verbal violence, controlling behavior, and threats to safety.

Procedure

Once approval from the Institutional Review Board (Protocol # 0808-080) was obtained, the instruments were administered in classrooms to a convenience sample of students who willingly participated in the study at the eleven campuses (margin of error = 2%; level of confidence = 95%). The inclusion criteria was students of age sixteen or older that were registered at one of the campuses of the University of Puerto Rico, that received services in their counseling centers. Students that wished to voluntarily participate were given an informative form (modified and approved informed consent) and the questionnaire. The participants placed their questionnaire, completed or empty, in the mailbox situated in the waiting area to avoid identification. To analyze data, frequencies, arithmetic mean, t tests, the Pearson Correlation Coefficient and Multiple Regression Coefficients were obtained using Statistical Package for Social Sciences.
One item related to controlling behavior was excluded with the authors’ permission because it was not operationalized.

**RESULTS**

The most frequent context for violence was in intimate partner relationships with 70.7% for violence received from partner (29.3% did not receive violence from partner) and 70.4% for violence perpetrated against partner (29.6% did not perpetrated violence against partner). The most frequent forms of violence were controlling behavior (81.8%) [18.2% without controlling behavior] and verbal violence (80.8%) [19.2% without verbal violence]. As seen in Table 1, verbal violence was most frequently witnessed between parents (53.7%), while controlling behavior was most frequently received from partner (63.0%). Threats to safety occurred most frequently in the family of origin as witnessed between parents (9.7%) and received from parents (8.7%). Physical violence was most frequently received from parents (43%) and perpetrated against partner (36%). The most frequent expression of controlling behavior was provoking conflict for spending time with friends, family or co-workers, while the most common form of verbal violence was screams or insults. In terms of threat to safety, threatening with an object or weapon was the most common, while the destruction of objects or hitting the wall when angry was the most frequently reported form of physical violence.

**TABLE 1.**
Frequency and percentages of experiences of violence in couple and family relations in university students by type of violence.

<table>
<thead>
<tr>
<th>Type of Violence</th>
<th>Received from partner</th>
<th>Perpetrated to partner</th>
<th>Witnessed between parents</th>
<th>Received from parents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>f</td>
<td>%</td>
<td>f</td>
<td>%</td>
</tr>
<tr>
<td>Controlling behavior</td>
<td>2458</td>
<td>63.0</td>
<td>1944</td>
<td>49.9</td>
</tr>
<tr>
<td>Verbal violence</td>
<td>1874</td>
<td>48.2</td>
<td>1951</td>
<td>50.1</td>
</tr>
<tr>
<td>Threat to safety</td>
<td>258</td>
<td>6.8</td>
<td>1205</td>
<td>3.5</td>
</tr>
<tr>
<td>Physical violence</td>
<td>1113</td>
<td>29.4</td>
<td>1404</td>
<td>36.1</td>
</tr>
</tbody>
</table>

Note. f = frequency; Experiences Questionnaire on Violence in Couple and Family Relations in University Students (2012). Authorization was received from the authors to exclude one item from the controlling behavior sub-scale received from parents because it was not operationalized.

To explore the relationship between violence in the family of origin and violence in intimate partner relationships correlation analyses were conducted. The strongest association was observed in the family of origin; violence witnessed between parents and received from parents \((r = 0.637, p \leq .001)\). This was followed by intimate partner relationships, violence received from partner and perpetrated against partner \((r = 0.593, p \leq .001)\). The next correlations in order of strength were violence received from parents and received from partner \((r = 0.314, p \leq .001)\); violence received from parents and perpetrated against partner \((r = 0.302, p \leq .001)\); and violence witnessed between parents and received from partner \((r = 0.288, p \leq .001)\).

Multiple regression analyses were conducted to measure the weight of the experiences of violence in the family of origin in relation to the experiences of violence in intimate partner relationships. The coefficient revealed that the predicting variables witnessed between parents and received from parents explain about a tenth of the variance in the violence perpetrated against partner, \(F(2, 3789) = 213.620, p \leq .001, \) and received from partner, \(F(2, 3789) = 221.369, p \leq .001\) (see Table 2).

A t test was conducted to examine if there were any differences by sex and type of violence in the sub-scales (see Table 3). The following significant differences were found: men reported receiving more controlling behavior from their partners \((t (3878)=2.794, p \leq .001)\).
p ≤ .05), more physical violence from their parents (t(3808) = 3.258, p ≤ .001), witnessing more controlling behavior between the parents (t (3923) = 1.096, p ≤ .05), and perpetrating more physical violence toward their partners than women (t(3915) = 0.761, p ≤ .001). Women reported more physical violence from their partners (t(3765) = -3.921, p ≤ .001), more controlling behavior from their parents (t(3790) = -1.287, p ≤ .01), witnessing more threats between their parents (t(3921) = -2.299, p ≤ .001), while exerting more controlling behavior (t (3876) = -3.040, p ≤ .05) and verbal violence than men (t (3870) = -7.625, p ≤ .05).

TABLE 2.
Multiple regression analysis of violence in the family of origin and intimate partner relationships by sex.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Violence perpetrated against partner</th>
<th>Violence received from partner</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>95% CI</td>
</tr>
<tr>
<td>Women</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(n = 1,051)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>1.502*</td>
<td>[1.383, 1.622]</td>
</tr>
<tr>
<td>VRFP</td>
<td>0.249*</td>
<td>[0.192, 0.306]</td>
</tr>
<tr>
<td>VWBP</td>
<td>0.130*</td>
<td>[0.090, 0.170]</td>
</tr>
<tr>
<td>R²</td>
<td>0.111</td>
<td></td>
</tr>
<tr>
<td>Adj. R²</td>
<td>0.110</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>157.434</td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(n = 601)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>1.192*</td>
<td>[1.034, 1.351]</td>
</tr>
<tr>
<td>VRFP</td>
<td>0.227*</td>
<td>[0.154, 0.300]</td>
</tr>
<tr>
<td>VWBP</td>
<td>0.124*</td>
<td>[0.071, 0.178]</td>
</tr>
<tr>
<td>R²</td>
<td>0.102</td>
<td></td>
</tr>
<tr>
<td>Adj. R²</td>
<td>0.100</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>76.148</td>
<td></td>
</tr>
</tbody>
</table>

Note. CI = Confidence Interval. VRFP = Violence received from parents; VWBP = Violence witnessed between parents. *p < .01

TABLE 3.
Mean scores, standard deviations and t tests of forms of violence by sex.

<table>
<thead>
<tr>
<th>Scales</th>
<th>Received from partner M (SD)</th>
<th>Perpetrated against partner M (SD)</th>
<th>Witnessed between parents M (SD)</th>
<th>Received from parents M (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Controlling behavior</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>1.64 (1.51)</td>
<td>0.88 (1.17)</td>
<td>1.12 (1.25)</td>
<td>0.03 (0.18)</td>
</tr>
<tr>
<td>Women</td>
<td>1.49 (1.56)</td>
<td>1.01 (1.22)</td>
<td>1.08 (1.33)</td>
<td>0.04 (0.20)</td>
</tr>
<tr>
<td>t-test</td>
<td>2.794*</td>
<td>-3.040*</td>
<td>1.096*</td>
<td>-1.287***</td>
</tr>
<tr>
<td>Verbal violence</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>0.76 (0.85)</td>
<td>0.60 (0.77)</td>
<td>0.90 (0.87)</td>
<td>0.65 (0.81)</td>
</tr>
<tr>
<td>Women</td>
<td>0.75 (0.85)</td>
<td>0.80 (0.82)</td>
<td>0.92 (0.88)</td>
<td>0.64 (0.82)</td>
</tr>
<tr>
<td>t-test</td>
<td>0.187</td>
<td>-7.625*</td>
<td>-0.761</td>
<td>0.381</td>
</tr>
<tr>
<td>Threat to safety</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>0.07 (0.30)</td>
<td>0.03 (0.19)</td>
<td>0.11 (0.39)</td>
<td>0.10 (0.35)</td>
</tr>
<tr>
<td>Women</td>
<td>0.09 (0.35)</td>
<td>0.05 (0.25)</td>
<td>0.14 (0.44)</td>
<td>0.11 (0.36)</td>
</tr>
<tr>
<td>t-test</td>
<td>-2.82***</td>
<td>-1.625***</td>
<td>-2.299***</td>
<td>-0.261</td>
</tr>
<tr>
<td>Physical violence</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>0.33 (0.62)</td>
<td>0.44 (0.57)</td>
<td>0.42 (0.66)</td>
<td>0.64 (0.76)</td>
</tr>
<tr>
<td>Women</td>
<td>0.42 (0.67)</td>
<td>0.42 (0.64)</td>
<td>0.44 (0.70)</td>
<td>0.56 (0.72)</td>
</tr>
<tr>
<td>t-test</td>
<td>-3.921***</td>
<td>0.761***</td>
<td>-0.783*</td>
<td>3.258***</td>
</tr>
</tbody>
</table>

Note. M = mean; SD = standard deviation; *p < .05 level of significance; **p < .01 level of significance; ***p < .001 level of significance.
DISCUSSION

The results of this study suggest that violence in the family of origin and intimate partner relationships is a common problem in this population. About 70% of students had been victims, perpetrators, or both of some form of violence in their intimate relationships, which may suggest that participants might have experienced bidirectional violence (Bilton et al., 2016; Petering, Rhodes, Rice & Yoshioka-Maxwell 2015). While this estimate appears to be high, variation in prevalence can be observed across studies for multiple reasons, making it difficult to establish comparisons. The variability may be related to the types of violence measured (single versus multiple), operational definitions of violence, and the time frame studied (lifetime versus last year).

In terms of physical violence, the results for women victimization are similar to other studies (Vázquez et al., 2010), including a U.S. nationally representative survey (Breiding, Chen, & Black, 2014). Psychological violence proved to be more frequent than physical violence, which is consistent with most studies showing that emotional violence is the most prevalent among college students (Forke et al., 2008; Gover et al., 2008; Muñoz-Rivas et al., 2007; Vázquez et al., 2010). Over half of students experienced some form of verbal violence or controlling behavior in their intimate relationships.

When comparisons by sex are made in terms of exerted and received IPV, it must be noted that both men and women have received more controlling behavior and threats to their safety from their partners than what they exerted. However, both exerted more physical violence towards their partners than the physical violence they received from their partners. Psychological violence could have been a precursor for physical violence in this sample, as both men and women were mainly victims of psychological violence and perpetrators of physical violence. Age might play a role in the expression of IPV as young age has been identified as a predictor for violent behavior (Elbogen & Johnson, 2009) and most of our sample (58%) consisted of people between 16 and 20 years of age who have less maturity and impulse control; only 7% of the participants were 25 years or older (Pratt, Turanovic, Talbot & Wright, 2014; Turanovic, Reisig & Pratt, 2015).

Nearly half of students experienced physical violence from their parents, representing the highest proportion of physical violence in any context (Gratz, Paulson, Jakupcak, & Tull, 2009; Thompson et al., 2006). This probably accounts for corporal punishment in parenting practices. The observed rate for physical violence received from parents is higher than other studies (Gratz, Paulson, Jakupcak, & Tull, 2009; Thompson et al., 2006). In addition, nearly one third of students witnessed physical violence between their parents, which is consistent with the literature (Lehrer, Lehrer, & Zhao, 2009; Palmetto et al., 2013). While results from other studies are similar to ours, there are greater differences in physical violence received from the parents. Although the measures used to measure physical violence could account for the differences between studies, the issue of parenting practices and physical and emotional abuse towards children in PR merits a closer look. Puerto Rico’s rates for physical and psychological maltreatment among children are higher than the U.S. national rates: PR’s rate of 26.6% for physical abuse is higher than the U.S. rate of 18.0%, and PR’s rate of 49.8% for psychological maltreatment is much higher than the U.S. rate of 8.7% (U.S. Department of Health and Human Services, Administration for Children and Families, Administration on Children, Youth and Families, 2014). Our results highlight this issue as a main concern and could shed light into the differences in national IPV rates between the U.S. and PR. Differences in the way that children are disciplined may contribute to the higher rates of IPV; further study on this subject is required.
Analysis revealed statistically significant differences by sex, as seen on Table 3. Men reported having received greater physical violence from their parents, which may be related to the notion that men can be treated more roughly than girls. Childhood experiences of violence are a risk factor for IPV in adulthood, and those who experience corporal punishment as children are more likely to hit their partner (Douglas & Straus, 2006). Consistent with these findings, men reported more physical violence toward their partners, while women received greater physical violence and exerted less physical violence.

Women received more threats to their safety from their partners and perpetrated this threat more often which might be related to having witnessed more threats between their parents, hence, it seems to be an experience that is replicated in their intimate relationships. Although women threatened their partners more often, men exerted more physical violence in this study. Several studies have found that women exert more physical violence (Cercone, Beach, & Arias, 2005; Forke & Myers, 2008; Milletich et al., 2010; Straus, 2008). However, it has been pointed out that studies showing greater rates of violence perpetrated by women have problems in the way that questions are formulated, and also exclude the terms stalking and sexual abuse, as well as separated couples (Saunders, 2002). Issues related to men underreporting violence perpetration have also been raised. Results showing more injurious physical assaults committed by women in countries like India and Mexico, as well as no significant differences in injurious physical assaults between men and women from Iran (Straus, 2008) should elicit questions regarding violence self-reports. Two U.S. population-based studies have found that women experience more physical violence from their partners, which is consistent with our findings (Breiding et al., 2014; Coker et al., 2002).

It is also important to distinguish between physical aggressions such as a slap, which women may perpetrate more, to aggressions with physical consequences such as injuries requiring medical treatment, which may be perpetrated more often by men. This is supported by Lehrer et al. (2009), who found that men were the recipients of most physical assaults, but women were the recipients of most injurious assaults. It is also consistent with domestic violence statistics in PR and the U.S., where most of the murders by a partner and reported domestic violence assaults are committed by men (U.S. Department of Justice, 2016; Women's Advocate Office, 2016). The statistics of murders and assaults highlight what several studies suggest about the consequences of victimization being consistently more severe and injurious for women (Muñoz-Rivas et al., 2007; Saunders, 2002; Smith, Fowler, & Niolon, 2014). However, it must not be assumed that men always initiate or perpetrate all forms of violence. In many cultures, particularly Latino culture, when men are victims of violence in their relationships, they might not report it to authorities because of shame and fear of being mocked (Welland & Ribner, 2010). Consistent with other studies (Coker et al., 2002; Gover et al., 2008), women reported perpetrating more emotional violence. Results suggest that, in this study, women exerted more psychological violence, while men exerted more physical violence. The hypothesis that differences by sex would be found was confirmed. Latino machismo might play an important role in the expression of physical violence as hostile sexism towards women has been found in Latin America (Boira, Chilet-Rosell, Jaramillo-Quiroz, & Reinoso, 2017).

The other main hypothesis, which posed that experiences of violence in the family of origin are related to experiences of violence in intimate relationships, was also confirmed. The strongest relationship was observed in the context of the family of origin, which suggests that when there is domestic violence, it extends to the other family
members within the home, and the children are mistreated as well. The second strongest correlation was in the context of intimate relationships, which might suggest bidirectional violence. Other significant correlations related violence received from the parents with violence received from the partner and perpetrated against the partner. This suggests that violence directly received from parents has a greater impact than the violence witnessed between parents. Moreover, when we examine the weight of these two variables in multiple regression analyses, we find that violence received from parents has more weight than the violence witnessed between parents. As suggested by Widom (2017), the consequences of these two childhood experiences are likely to differ. Our results are consistent with Gover et al. (2008) who found that those who experienced childhood abuse were significantly more likely to perpetrate physical dating violence, than those who only witnessed parental violence.

Limitations

The instrument did not explore bidirectional violence and the roles assumed by the parental figures as aggressors, victims, or both. It would be beneficial to explore who initiates violence and self-defense. Other limitations are: having to rely on their memory to respond and responding with a yes or no to the questionnaire because it does not provide information regarding severity. Also, the non-probabilistic sample used does not allow for the generalization of the data to the general college student population.

Conclusions

This is the first study to investigate IPV and the intergenerational transmission of violence with a large sample of Puerto Rican university students, making an important contribution to the literature. The results of this study highlight the importance of parenting practices as experiences of violence in childhood are associated with a higher tolerance towards IPV (Bucheli & Rossi, 2017) and may play a key role in the development of IPV. Interventions that are gender-specific and culturally appropriate are necessary (Alvarez, Davidson, Fleming, & Glass, 2016); therefore, cultural aspects exerting influence in the expression of IPV must be investigated. Both men and women must be targeted as psychological violence can also have devastating effects on physical and mental health (Coker et al., 2002; Straight et al., 2003). Interventions that teach about assertive communication, conflict resolution, and emotion/anger management should be implemented to avoid psychological violence escalating to physical violence as results from our study suggest. Activating the social network and community-based resources is important considering the relevance of family and social networks among Puerto Ricans. The deconstruction of patriarchal values among frequent perpetrators has been suggested for college men (Kelley, Edwards, Dardis, & Gidycz, 2015) and is advisable for this PR college population.

Considering the results of this study, it is important for college health professionals to work not only towards the prevention of violence in intimate relationships, but also to prevent abuse towards children. In the university setting, students who are parents and parents-to-be should be offered workshops related to raising children and establishing discipline without violence. Socio-cultural aspects that influence the expression of violence in PR must be addressed as boys are still asked by adults "how many girlfriends do you have?", as if having many girlfriends is a positive trait to aim for. Socio-cultural aspects, including social norms supportive of violence (McTavish, MacGregor, Wathen, & MacMillan, 2016) combined with parenting practices such as physical punishment may lay the foundation for a future abusive partner with notions of property regarding women. College health professionals in the U.S. must consider these issues when providing services to Puerto Ricans as many have moved to the mainland in recent years due to Puerto Rico’s economic crisis, and more so after Hurricane María hit the island. Locally,
the PR government must contribute to prevention efforts by ensuring that gender equity is taught in schools.

Financial and Conflict of Interest Declaration

This research was carried out with investigators' funds, all of whom worked at the Department of Counseling for Student Development, University of Puerto Rico, Rio Piedras Campus. Also, this research was approved by the Institutional Review Board (Protocol #0809-080).

REFERENCES


Journal of Criminology, 3, 293-318. doi:10.1177/1477370806065584


Thompson, R. S., Bonomi, A. E., Anderson, M., Reid, R. J., Dimer, J. A., Carrell, D.,


