



Does Domestic Violence Against Women Increase Teacher–Student School Violence? The Mediating Roles of Morbidity and Diminished Workplace Performance

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Abstract

This research reveals how domestic gender violence suffered by female teachers affects teacher–student school violence in the classroom. Based on a representative survey of 1,542 female professors in 95 public schools in the Callao metropolitan region of Peru using variance structural equation modelling, there is a strong positive relation found between both types of violence ($\beta = 0.34$), accompanied by the existence of mediating effects of morbidity and diminished workplace performance. These results demonstrate that in order to reduce the incidence of school violence we must not only address violence between educators and students, but also violence suffered by teachers at the hands of their domestic partner.

Keywords

morbidity, teacher–student violence, workplace performance, female educators, intimate partner violence, violence against women

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Introduction

Educational institutions should foster an atmosphere of respect, calm, and peaceful relations among all participants in order to achieve their mission of producing an educated citizenry. Nevertheless, a number of diverse studies have reported the prevalence of high levels of violence between teachers and students (Chen & Astor, 2011; Dzuka & Dalbert, 2007; Maeng et al., 2020; McMahon et al., 2011; Okoza et al., 2011; Shumba, 2002; Vargas-Barón & Alarcón, 2005), with resulting negative effects on the educational environment, learning, the social and ethical development of students, and the academic and work performance of educators as well (Chen & Astor, 2011; Espelage et al., 2013; Lyon & Douglas, 1999; Moon et al., 2019; Reddy et al., 2018; Wilson et al., 2010).

Teacher–student violence refers to those actions with the intention of causing harm which occur between an educator and his/her students, including insults, threats, destruction of property, physical attacks, and sexual harassment, among other types. The few existing studies related to this topic have focused on the educator as a victim of verbal or physical violence or material harm but little beyond that (e.g., Chen & Astor, 2009, 2011; Dzuka & Dalbert, 2007; Khoury-Kassabri et al., 2009; McMahon et al., 2011; Moon et al., 2019; Reddy et al., 2018; Wilson et al., 2010). Although teacher–student violence is a clear example of breakdown in authority with a destructive effect on education, we still know very little about the diverse contextual factors that contribute to such violence (Reddy et al., 2018).

This study seeks to determine the degree of effect that some factors related to the personal situation of female educators are associated with the probability of experiencing teacher–student violence. Beyond mere demographic or labor variables (the most commonly analyzed of which include gender, race, primary vs. secondary school teacher, urban setting, and work climate [Reddy et al., 2018]) this study analyzes the effects of three personal variables which characterize the female educators. The authors propose that intimate partner violence against women, a serious violation of human rights, can increase the occurrence of violence between teachers and students in the educational setting. The causal mechanism in this relation rests on two mediating variables related to health and work performance: morbidity and workplace performance.

Violence against women is a serious problem that transcends the limits of private domestic life and carries on affecting societal institutions where the victims work or spend significant time. In the case of educational institutions, the literature shows that exposure to violence in the home as well as injury due to domestic violence, contribute to both reduced academic performance

and increased disruptive or unfocused classroom behavior on the part of students (Fantuzzo & Mohr, 1999; Hornor, 2005; Wolfe et al., 2003). Nevertheless, we do not know the extent of its effect on educators themselves; or rather the degree to which exposure to gender-based violence and its effects on the victim's health can affect teacher performance and the incidence of violence in the classroom setting.

The above issue is particularly relevant in societies where gender violence against women is most prevalent. According to World Health Organization estimates, at least 3 out of 10 women worldwide have suffered either physical or sexual attack at the hands of their intimate partner (WHO, 2013). In Latin American countries such as Peru, Ecuador, and Bolivia, the prevalence is much greater (Bott et al., 2019). Violence against women does not discriminate by age, ethnicity, social class, level of education or profession, and in fact, a considerable number of women with post-secondary education are victims of intimate partner violence (Guedes et al., 2014). This leads one to conclude that there is a high probability that female educators are included in this population. As far as we know, there is no extant research that has measured the prevalence of intimate partner violence against female educators as a group. Moreover, we do not know how such intimate partner violence can affect classroom education and the relation of the female educator with her students. Lack of awareness of this subject can hide a serious problem in the field of education and restrict innovative methods of violence prevention as well.

Beyond the expectation of a significant incidence of domestic violence experienced by female educators, the observer might suppose that significant levels of physical or psychological occur also as a result of such violence. There is abundant evidence demonstrating that intimate partner violence results in harm to physical and mental health among women (e.g., Cerulli et al., 2012; Coker et al., 2002; Constantino et al., 2000; Ellsberg et al., 2008; Garcia-Moreno & Watts, 2011; Golding, 1999; Humphreys, 2011; Nixon et al., 2004; Pico-Alfonso et al., 2006; Plichta, 2004; Sutherland et al., 2002; Vung et al., 2009; WHO, 2021). This physical and mental harm (morbidity) can create a situation where the educator is not in optimal conditions to perform her work. High levels of anxiety, fatigue, frustration, post-traumatic stress, and depression can dispose the teacher to be less patient and tolerant and even increase the likelihood of hostility directed at students. There is not any empirical evidence at this point of such a causal effect in spite of increasing concern for the mental and physical health of educators and their influence on the well-being of students under their charge (Harding et al., 2019).

As has been noted among female employees of diverse business sectors, physical and emotional harm resulting from domestic gender violence can

significantly diminish labor productivity (e.g., Duvvury et al., 2020; Moe & Bell, 2004; Reeves & O’Learly-Kelly, 2007; Swanberg et al., 2005; Tolman & Wang, 2005; Vara-Horna, 2013). Furthermore, it can be expected that harm to physical and mental health caused by intimate partner violence may also result in weakened work performance in diverse educator activities such as student contact, classroom discipline and supervision, evaluation of students, and even greater likelihood of aggressive behavior between the teacher and students. However, study of inadequate educator performance has so far been limited to the area of legal liability (Newnham, 2000), and there is much we do not know about the extent that diminished workplace performance in educator performance is a predictor of teacher–student violence. There is both conventional wisdom and many anecdotal reports suggesting an association between student–teacher violence and conflictive relationships with family and school authority figures, but there is a lack of empirical evidence which would support a more detailed explanation of the factors involved.

This study proposes that three variables will have a causal relation, where intimate partner violence is the exogenous independent variable and teacher–student violence is the dependent variable. Between these two, morbidity and workplace performance are mediating variables which explain the relation between the two types of violence. This is to say that intimate partner violence increases the probability of morbidity, which in turn results in diminished workplace performance, and both together increase the possibility of teacher–student violence in the educational setting. The authors seek to test this conceptual model, first measuring the prevalence of these four variables and subsequently analyzing the structural relations. Four hypotheses will be tested:

H_1 : The existence of a direct effect of intimate partner violence on morbidity.

H_2 : The direct effect of morbidity on teacher workplace performance.

H_3 : The direct effect of teacher workplace performance on teacher–student violence.

H_4 : The indirect effect of intimate partner violence on morbidity, workplace performance and teacher–student violence.

Methodology

Sample

Data were obtained from female educators, who had an intimate partner either currently or in the past, and who teach in public primary or secondary schools in the urban region of Callao, Peru. According to the Peruvian

Ministry of Public Education, there are 221 public primary and secondary schools in Callao which serve a total of 106,187 students and employ 3,899 female educators (approximately 77% of the total of educators in the region). Of this group, 1,542 female educators (39.5% of the total) employed in 95 schools were surveyed.

Characteristics of the survey sample were as follows. The surveyed educators had an average age of 46 years ($SD = 8.64$); the majority had a current intimate partner (79.2%) and had children (82.4%). Regarding labor characteristics, 59.9% of respondents taught in primary school and 40.1% in secondary school. Average job tenure of respondents was 12 years, and average monthly salary earned among respondents was US\$469. As far as teaching subjects, 64% of respondents taught communications, 60.4% logic or mathematics, 57.8% science or environmental studies, 54.8% religious or ethical education, 54.3% art, 30.6% physical education, 28.3% social sciences, 28% personal, family and human relations, 10.6% vocational education, and 7% foreign languages (as can be inferred, many educators teach multiple subjects). Finally, 30.3% of respondents at the time of the survey were studying for a continuing education certificate or graduate degree (15.8% for a continuing education certificate, 10.2% for a master's degree, 2.6% for a second undergraduate degree, and 1.7% for a doctoral degree).

The teachers were surveyed at their workplace. Access to the 95 schools occurred in two phases. In the first phase, the authors of this study obtained permission from the Regional Education Department of Callao, which issued a multiple authorization to the Directors of the schools, requesting their cooperation in the administration of this survey among all female faculty. In the second phase, the interviewers surveyed the female faculty members in one of five different settings according to the determination of school management during the regular school workday in the classroom, general internal faculty meetings, the faculty member's lunchroom break, special faculty seminars, or at the hour of entry or exit from school. The questionnaires were applied in group form, in classrooms, auditoriums, and school laboratories. Before completing the questionnaire, the educators were informed of the objectives and scope of this research project, and their informed consent was requested in order to participate. Faculty participation was anonymous with assurance of confidentiality via use of an urn to deposit the completed questionnaire. Also, the faculty members were informed that their individual responses would not be accessible to school management, thus guaranteeing the respondent's privacy.

Instruments

This study features an anonymous survey, in self-report form, with four measurement scales, in addition to demographic and employment information.

Intimate partner violence. According to the WHO (2021), intimate partner violence against women refers to any behavior by a current or former male intimate partner within the context of marriage, cohabitation, or any other formal or informal union, which causes physical, sexual, or psychological harm. In this study, the construct is defined as any act of aggression committed against women by their intimate partner or ex-partner in the context of gender inequality, including acts intended to force the women to act against their own individual will or well-being. Measurement is through 11 items which measure physical, psychological, economic, and/or sexual aggression, adapted from the Conflict Tactics Scale (Straus, 1997) and the National Violence Against Women Survey (NVAWS) of the Center for Disease Control and Prevention (Bachman, 2000; Tjaden & Thoennes, 2000). The participants indicated the frequency of violence they suffered on an ordinal 15-point scale (from never to more than 20 times within the last 12 months). This scale delineates two periods: any act of intimate partner violence experienced during the last year only and the prevalence of violence over the lifetime of the intimate partner relationship.

Teacher–student school violence. This construct is defined as psychological attacks (insults and threats), lesser physical violence (pushing or striking), and serious physical violence (attacks with an object) realized by both teachers and students against each other in the classroom. While there are different scales to measure student violence against educators (Chen & Astor, 2009, 2011; Dzuka & Dalbert, 2007; Khoury-Kassabri, 2009; McMahan et al., 2011; Wilson et al., 2010), in this study, we used a short scale with six bidirectional indicators (to measure either aggression received or committed) and responses regarding incidents of violence were recorded on a 15-point scale (from never to more than 20 times within the last 12 months). The scale includes violent acts suffered by the female teacher (students have insulted or threatened the teacher, students have pushed or struck the teacher, students have attacked teacher with an object), and violent acts committed by the female teacher (teacher has insulted or threatened her students, teacher has pushed or struck her students, teacher has attacked her students with an object). With this scale one can determine both violence which occurred in the most recent year and that which occurred over the entire lifetime of the intimate partner relation.

Morbidity. This scale was constructed using the combination of two dimensions: harm to one's mental or physical health, and presenteeism,

which will be defined below. Harm to health is defined as psychological harm, less serious physical harm and/or serious physical harm during the most recent 12 months, not necessarily connected to intimate partner violence, but rather as a result of any cause. The scale used in this study was constructed using a range of mental and physical symptoms reported by female victims of violence in previous research (e.g., Campbell et al., 2002; Coker et al., 2002; Constantino et al., 2000; Golding, 1999; Pico-Alfonso et al., 2006; Plichta, 2004). Mental symptoms included feeling depressed or a sense of hopelessness, feeling fearful, anxious, or anguished or having considered suicide. Physical symptoms included feeling ill or severe pain in some part of the body, walking with difficulty or with severe pain or suffering contusions, luxation, or sprains in some part of body. On the other hand, the dimension of presenteeism included here refers to the quality of being physically present but distracted, fatigued, and/or exhausted, thus not able to provide one's full attention or abilities at work. This dimension is identified based on questionnaire items related to workplace distraction from Stewart et al. (2003) and the Work Limitations Questionnaire (WLQ) from Lerner et al. (2001) adapted to the context of an educational institution. The participants responded to both dimensions on a 14-point scale (from never to more than 20 times).

Diminished workplace performance. This construct refers to diminished or inadequate performance of educational functions by educators in the classroom. These items were adapted from the Parent-Child Conflict Tactics Scale (Straus et al., 1998) with a modification replacing the concept of inadequacy or inattention in the role of the parent necessary for child development with that of inadequacy or inattention in the role of the educator in the classroom. This construct includes actions indicating inadequate school performance such as negligence (e.g., leaving her students in class in order to attend personal matters; students having accidents in the classroom due to teacher inattention; errors committed while grading exams or teaching class) and the consequences of such inadequate performance (parents have complained about the educator as a result of comments or complaints received from their children; the school authority has communicated a warning of inadequate performance to the educator). Participants responded on a 14-point scale, from never to more than 20 times.

Instrument Reliability and Viability

In order to evaluate internal consistency, Joreskog rho was determined for composite reliability (Hair et al., 2017). Values between 0.70 and 0.90 were considered acceptable and satisfactory (Nunally & Bernstein, 1994).

Table 1. Reliability and Validity of Scales.

| Scales (Number of Items) | Factor Loading [lower – upper] | Composite Reliability | Average Variance Extracted (AVE) |
|---|-----------------------------------|--------------------------|-------------------------------------|
| <i>Intimate partner violence against women (11)</i> | | 0.853 | 0.598 |
| Psychological violence (3) | 0.790 ; 0.846 | 0.881 | 0.713 |
| Economical violence (2) | 0.758 ; 0.917 | 0.827 | 0.707 |
| Physical violence (4) | 0.478 ; 0.872 | 0.860 | 0.616 |
| Sexual violence (2) | 0.882 ; 0.926 | 0.900 | 0.818 |
| <i>Teacher–student school violence (6)</i> | | 0.782 | 0.647 |
| Psychological school violence (3) | 0.748 ; 0.759 | 0.725 | 0.568 |
| Physical school violence (3) | 0.650 ; 0.722 | 0.791 | 0.487 |
| <i>Morbidity (10)</i> | | 0.853 | 0.660 |
| Presenteeism (4) | 0.804 ; 0.834 | 0.888 | 0.664 |
| Psychological harm (3) | 0.512 ; 0.924 | 0.841 | 0.651 |
| Physical harm (3) | 0.637 ; 0.897 | 0.853 | 0.665 |
| <i>Diminished workplace performance (5)</i> | 0.660 ; 0.872 | 0.819 | 0.694 |

Construct validity was verified through use of the measurement model PLS-SEM. To establish convergent validity, indicator factor loadings of at least 0.708 and average variance extracted (AVE) with values exceeding 50% were required. Examining Table 1, all composite reliability values were satisfactory, as they were above the desired optimum figure. Regarding convergent validity, the greater part of indicators presented factor loadings above the expected figure (0.706), with an AVE by dimension in all cases except one above 50% (AVEs ranged from 49% to 82%; physical school violence was approximately 49%).

Data Analysis for the Test of Hypothesis

In order to test the existence of significant relations between intimate partner violence and teacher–student violence as well as the explanatory hypothesis, Partial Least Squares Structural Equations Modeling (PLS-SEM) was used,

specifically via SMART-PLS version 3.2.7 software. In this case, standardized coefficients (β) represent the hypothesized relations between latent constructs, and the values had to be greater than 0.1 in order to be considered significant. The coefficient of determination (R^2) is the proportion of the variance in the dependent variable that is predictable from the independent variable and had to be superior to 0.1 in order to be significant (Hair et al., 2017). In order to identify the precision of estimates of the path coefficients (Beta) and to determine the statistical significance in the hypothesis test, the Bootstrap Resampling Technique was used (5,000 times, with the option of no sign changes). This technique estimates the standard error, which permits the calculation of student t and p values of the path coefficients. These were considered significant in cases of $p < .05$ and when the t score was greater than the critical value (1.96, level of significance of 5%).

Results

Prevalence

A total of 43.7% female educators reported that they had been assaulted by their current or former intimate partner at least once during their relationship. Considering the most recent 12 months, 24% had been assaulted with the average number of total incidents during the past year reported by this group of victims being 8.7 episodes ($SD = 16.85$). Psychological violence (acts of humiliation, insults, or threats) and lesser physical violence (being struck, pushed, subjected by the arm, slapped, kicked, or bitten) were the most frequently reported (Table 2).

Regarding teacher–student violence, 19.8% of respondents reported having experienced some type of violent incident involving students, either on the receiving or delivering end. When considering only the most recent year, 14.2% of female educators reported an average of 3.6 violent episodes annually. The most frequent assaults were in the form of insults or threats, followed by being struck or pushed, and being attacked with an object (see Table 3). There were no significant differences when comparing primary vs. secondary schools.

In terms of morbidity, in general the female educators who were assaulted by their intimate partners faced a greater probability of suffering incidents of morbidity when compared to those who were not victims of such violence (see Table 4). This relation has been found in all measured indicators of morbidity, with the most predominant being thoughts of suicide ($OR = 3.8$), anxiety ($OR = 2.7$), and depression ($OR = 2.5$).

Table 2. Prevalence of Female Educators Assaulted by Their Intimate Partner, According to Nature of Assault and Frequency.

| | At Least Once During Relationship (%) | Most Recent Year (%) | Mean Recent Year Frequency of Episodes (SD) |
|---|---|----------------------------|---|
| <i>Psychological violence</i> | 41.2 | 21.3 | 6.0 (9.62) |
| Has been humiliated by intimate partner, receiving hurtful comments that have caused her humiliation. | 38.2 | 18.4 | 3.8 (4.79) |
| Has been harassed while she was working or leaving work. | 6.8 | 3.4 | 4.5 (5.32) |
| Has been threatened, insulted, or verbally attacked. | 21.0 | 10.5 | 4.3 (5.36) |
| <i>Economic violence</i> | 10.6 | 5.9 | 5.4 (8.18) |
| Has received threats depriving her of money if she does not obey her partner. | 8.4 | 4.9 | 5.0 (6.31) |
| Has had money taken from her by partner. | 4.9 | 2.0 | 3.6 (5.76) |
| <i>Physical violence</i> | 18.5 | 9.4 | 3.7 (7.28) |
| Has been pushed or had her arm twisted or subjected by force. | 16.5 | 7.8 | 2.4 (3.41) |
| Has been struck (slapped, kicked, or bitten). | 8.1 | 3.4 | 2.9 (4.29) |
| Has been attacked with an object (e.g., stick, sharp edged weapon, or firearm). | 1.5 | 0.8 | 1.8 (1.60) |
| Has suffered physical harm (e.g., bruises, sprains, fractures, lesions, cuts). | 4.3 | 2.0 | 2.4 (4.07) |
| <i>Sexual violence</i> | 6.9 | 3.5 | 4.9 (6.33) |
| Has been obligated to engage in sexual relations without her consent. | 6.6 | 3.1 | 4.1 (5.29) |
| Has been obligated to engage in sexual relations through threats or force. | 3.2 | 1.8 | 2.5 (2.37) |
| Total prevalence of incidence of violence | 43.7 | 24.0 | 8.7 (16.85) |

Table 3. Prevalence of Teacher–Student Violence, According to Type of Assault and Frequency.

| | At Any Time Before or During Most Recent Year (%) | During the Most Recent Year (%) | Mean Recent Year Frequency of Episodes (SD) |
|---|---|---------------------------------------|--|
| <i>Violent acts suffered by female teacher</i> | | | |
| Students have insulted or threatened the teacher | 14.2 | 9.9 | 2.6 (3.32) |
| Students have pushed or struck the teacher | 6.2 | 4.7 | 2.6 (2.95) |
| Students have attacked teacher with an object | 2.1 | 1.4 | 2.4 (2.25) |
| <i>Violent acts committed by female teacher</i> | | | |
| Teacher has insulted or threatened her students | 3.6 | 2.6 | 2.1 (2.09) |
| Teacher has pushed or struck her students | 3.1 | 2.2 | 1.6 (0.94) |
| Teacher has attacked her students with an object | 0.7 | 0.6 | 2.1 (1.45) |
| Prevalence of teacher–student violence (Total) | 19.8 | 14.2 | 3.6 (4.48) |
| Prevalence of teacher–student violence (primary school) | 19.3 | 13.7 | 4.05 (5.2) |
| Prevalence of teacher–student violence (secondary school) | 20.3 | 14.9 | 2.8 (3.1) |

Teachers who were victims of intimate partner violence were also more likely to exhibit examples of diminished workplace performance than those who were not victims (see Table 5). More specifically, teachers who had been victims of intimate partner violence presented approximately twice the probability of committing errors in grading student work or teaching class, witnessing a student suffer an accident in the classroom, or receiving a warning of inadequate performance from the school administrative authority.

Table 4. Difference in Incidence of Morbidity Between Female Educators' Survivors of Intimate Partner Violence (IPV) and Those Who Were Not Experiences IPV.

| | Female Educators Suffering Morbidity (%) | | | X ² | Odds Ratio (OR) | 95% Confidence Interval |
|--|--|---------|------------------|----------------|-----------------|-------------------------|
| | All | Non-IPV | Survivors of IPV | | | |
| <i>Presenteeism</i> | | | | | | |
| Difficulties in concentration or unusually distracted at work | 40.5 | 33.1 | 49.3 | 33.866 | 1.960 | [1.560; 2.461] |
| Worried about matters unrelated to work while on the job | 56.5 | 47.8 | 67.2 | 47.885 | 2.242 | [1.780; 2.822] |
| Worked slower than usual | 41.1 | 34.4 | 48.9 | 26.471 | 1.825 | [1.450; 2.297] |
| Experienced fatigue, being worn out or exhausted while at work | 62.7 | 55.6 | 71.6 | 34.626 | 2.015 | [1.593; 2.549] |
| <i>Mental or physical harm</i> | | | | | | |
| Felt depressed or sense of hopelessness | 43.7 | 33.6 | 56.2 | 68.292 | 2.539 | [2.031; 3.173] |
| Felt fearful, anxious, or anguished | 53.2 | 42.6 | 67.4 | 80.426 | 2.777 | [2.215; 3.481] |
| Considered suicide | 4.6 | 2.0 | 7.3 | 21.785 | 3.813 | [2.093; 6.948] |
| Felt ill or severe pain in some part of body | 66.2 | 58.7 | 75.0 | 39.230 | 2.103 | [1.663; 2.658] |
| Walked with difficulty or with severe pain | 52.6 | 46.3 | 60.5 | 26.520 | 1.771 | [1.424; 2.203] |
| Suffered contusions, luxation, or sprains in some part of body | 33.6 | 29.7 | 38.2 | 10.533 | 1.463 | [1.162; 1.842] |
| Total (combined) | 80.12 | 70.2 | 89.4 | 82.132 | 2.826 | [2.220; 3.598] |

Note. All differences are significant: $p < .01$.

Table 5. Difference in Indicators of Diminished Workplace Performance Between Female Educators Who Were Victims of Intimate Partner Violence (IPV) and Those Who Were Not.

| | Teachers Exhibiting Diminished Workplace Performance (%) | | | X ² | Odds Ratio (OR) | 95% Confidence Interval |
|--|--|-----------|------------------|----------------|-----------------|-------------------------|
| | All | Non - IPV | Survivors of IPV | | | |
| Educator has left her students in class in order to attend personal or other matters | 21.3 | 16.6 | 28.0 | 26.226 | 1.954 | [1.509; 2.532] |
| Educator has witnessed a student suffer an accident in the classroom | 24.5 | 18.5 | 31.8 | 32.593 | 2.052 | [1.599; 2.632] |
| Parents have complained about the educator as a result of comments or complaints received from their children. | 38.4 | 31.2 | 47.3 | 37.096 | 1.973 | [1.584; 2.459] |
| School authority has communicated a warning of inadequate performance to educator | 19.2 | 13.8 | 25.5 | 30.532 | 2.140 | [1.628; 2.814] |
| Educator has committed errors while grading exams or teaching class | 40.5 | 33.0 | 49.8 | 39.518 | 2.007 | [1.613; 2.497] |
| Total (combined) | 66.0 | 56.4 | 75.4 | 57.512 | 1.775 | [1.523; 2.069] |

Note. All differences are significant $p < .01$.

Table 6. Summary of the Test of Direct and Indirect Effects of Intimate Partner Violence (IPV) and Mediating Variables on Teacher–Student Violence.

| Relations | Global | | | Teacher–Student (Teacher Victim) | | | Teacher–Student (Teacher Perpetrator) | | |
|--|-------------------|----------|-------------------|-------------------------------------|----------|-------------------|--|----------|-------------------|
| | Coeff. β | t value | 95% BCCI | Coeff. β | t value | 95% BCCI | Coeff. β | t value | 95% BCCI |
| <i>Direct effects</i> | | | | | | | | | |
| IPV \geq Morbidity | 0.256 | 4.695*** | [0.168; 0.378] | 0.257 | 4.868*** | [0.174; 0.380] | 0.257 | 4.712*** | [0.169; 0.379] |
| Morbidity \geq Diminished workplace performance | 0.411 | 9.570*** | [0.331; 0.500] | 0.409 | 9.533*** | [0.330; 0.498] | 0.413 | 9.450*** | [0.330; 0.504] |
| Diminished workplace performance \geq Teacher–student violence | 0.285 | 4.837*** | [0.156; 0.391] | 0.200 | 3.083** | [0.096; 0.350] | 0.257 | 4.385*** | [0.151; 0.383] |
| <i>Indirect effects</i> | | | | | | | | | |
| IPV \geq Morbidity \geq Diminished workplace performance \geq Teacher–student violence | 0.030 | 3.125** | [0.016; 0.054] | 0.021 | 2.324* | [0.009; 0.045] | 0.027 | 3.236*** | [0.014; 0.047] |

Note. *** $p < .001$, ** $p < .01$, * $p < .05$; BCCI = Bias corrected confidence intervals.

Relation Between Intimate Partner Violence and Teacher–Student School Violence

This study has identified a significant association between intimate partner violence and teacher–student school violence. Female educators assaulted by their intimate partners, when compared with those educators who were not victims of such violence, had 2.1 times greater probability of being involved in incidents of violence with their students (confidence interval of 95% between 1.6 and 2.8). On the other hand, using PLS-SEM, a positive significant relation between having suffered intimate partner violence and morbidity was observed ($\beta = 0.256, p < .001$). Similarly, a positive significant relation between morbidity and diminished workplace performance was noted ($\beta = 0.411, p < .001$); and finally, a significant relation between diminished workplace performance and teacher–student violence was found as well ($\beta = 0.285, p < .001$).

The structural relations reveal empirically that intimate partner violence has a significant influence on the existence of teacher–student violence both committed and received through the mediating effect of morbidity and diminished workplace performance. The observer must be aware that this effect remains the same for teacher–student violence where the educator is either the victim or the one who commits the act of school violence (see Table 6). This suggests that one of the reasons that female educators who are victims of intimate partner violence have greater probability of experiencing violence with their students (either suffering or committing an act of violence) is because intimate partner violence may generate physical or emotional harm (morbidity), which in turn increases the likelihood of diminished fulfilment of teaching responsibilities in the classroom (diminished workplace performance). As a result, there is a greater likelihood of being victim or perpetrator of a violent act involving students. The combination of the three variables explains 11.2% of the variance in teacher–student classroom violence.

Discussion

This study provides empirical evidence that intimate partner violence against women significantly increases the probability of occurrence of teacher–student violence, through the mediating roles of two variables: morbidity and diminished workplace performance on the part of the educator.

Prevalence

The results indicate that 19.8% of female educators have experienced a violent incident with their students in the school environment, whether as the

aggressors or the victims of aggression. These data coincide with previous research which revealed the existence of students who were emotionally abused (through humiliation or insults) in the classroom by their teachers (Okoza et al., 2011; Shumba, 2002) as well as studies realized in the United States, Slovakia, Israel, and Taiwan indicating that a significant percentage of students have engaged in physical psychological acts of aggression or property damage against their teachers (Chen & Astor, 2009, 2011; Dzuka & Dalbert, 2007; Khoury-Kassabri et al., 2009; McMahon et al., 2011; Wilson et al., 2010).

In this study, there were no significant differences in teacher–student violence noted based on education level. A similar degree of prevalence was noted in both primary and secondary school environments. However, significant differences are found when comparing the prevalence of acts of violence committed versus acts of violence received by the educator. The teachers report a greater incidence of violence received (being victim) than violence committed (perpetrator). This result is not surprising, as it tends to be the norm when measuring the bidirectionality of violence in the educational environment just as among the general population, where the respondents tend to overestimate the frequency acts of violence received and underestimate frequency of acts of violence perpetrated (Ackerman, 2017). Nevertheless, apart from this percentage difference, the model proposed here has shown itself to possess significant explanatory power when applied to being either the victim or the perpetrator of violence.

Regarding the prevalence of intimate partner violence, approximately 4 in 10 female educators have been assaulted by their current or former intimate partner at least once in the relationship, and more than 1 in 5 have been assaulted during the most recent year, with an average recent year frequency of approximately 8.7 violent episodes. These are the first data concerning the prevalence of violence against female educators in the school environment, and it is difficult to make comparisons with other studies having different demographic and labor characteristics among respondents. However, the data concerning prevalence of violence reported here are within the range reported among the general population (Bott et al., 2019). Regarding the types of violence experienced by female educators during their entire relationship with an intimate partner, the most frequent was psychological violence (41.2%), followed by physical violence (18.5%), economic violence (10.6%), and sexual violence (6.9%). The same tendency was reported in other studies performed in the organizational environment but with slight variations. Still, psychological, and physical violence remain the most predominant types (Nouri et al., 2012; Pico-Alfonso et al., 2006; Sutherland et al., 2002; Vara-Horna, 2013).

With regard to diminished workplace performance on the part of the educator, 66 out of every 100 female educators reported at least one incident of such during the previous 12 months, with the most frequent example being that of committing errors in grading exams or in class teaching. It is significant that 24 of every 100 educators reported the occurrence of some type of student accident in their classroom under their watch, as physical injury is a serious problem in the school environment. Data from English-speaking countries have reported between 10% and 25% of all accidents suffered by minors occur in the school setting (Linakis et al., 2006; Zigel et al., 2019). This present study has found that having suffered intimate partner violence greatly increases the probability of student accident in a female educator's classroom as well as being associated with an increase in other indicators of diminished workplace performance such as leaving students alone in class in order to attend to personal issues.

Concerning educator morbidity, the results of this study indicate that 8 of every 10 female educators have suffered some type of physical or emotional harm. Nevertheless, when comparing by level of intimate partner violence, the educators who have been victims of such violence reported greater levels of fatigue or exhaustion, distraction, depression, anxiety, thoughts of suicide, bodily aches and pains, difficulty walking, contusions, luxation, or sprains in some part of their body. The results of this study are consistent with previous research indicating that intimate partner violence has a negative effect on the physical and mental health of women who are affected by it, through both the use of clinical samples and among the general population (Campbell et al., 2002; Coker et al., 2000, 2002; Constantino et al., 2000; Ellsberg et al., 2008; Nixon et al., 2004; Pico-Alfonso et al., 2006; Plichta, 2004; Sutherland et al., 2002; Vung et al., 2009). However, this is one of the first studies to examine this correlation among female educators.

The Path Model

This is the first study to evidence the relation between intimate partner violence experienced by an educator and teacher–student violence in the school setting. This association is particularly important as there remains much we do not know about the consequences of different types of violence in contemporary society. Advances have been made in understanding its intergenerational transmission, finding a consistently positive relation between being exposed to inter-parental violence as a child and the probability of committing violent acts as an adult in the future (Ehrensaft et al., 2003; Franklin & Kercher, 2012; Lee et al., 2013; Whitfield et al., 2003; Widom et al., 2014).

Furthermore, recent studies have examined the association between different types of violence in diverse settings, including the educational context. This study is the first to provide empirical evidence revealing a correlation between intimate partner violence against women and teacher–student violence.

We might suppose that the strength of this association would have been even more apparent if a scale incorporating more details or types of violence had been included in this study. This being the first study on this particular topic, the authors have only measured certain forms of verbal violence as well as less serious or serious physical violence, but other more detailed forms could be studied in the future. At this juncture, it was very problematic to survey this effect with a greater level of intimate detail or using more detailed personal questions which might cause embarrassment and reluctance to participate. Hopefully in the future, it will be possible to include more precise indicators of personal violence, and there are grounds to suspect that when such is done, it will reveal an even greater prevalence and correlation of intimate partner violence suffered by the educator with violence in the classroom.

According to Loftin (1986) and Slutkin (2013), violence functions as a pathological social contagion, being transmitted from one person to another, whether through witnessing its occurrence or being its object. Various studies have found that exposure to violence increases the possibility of the person becoming its perpetrator (Guerra et al., 2003; Roberts et al., 2010; Stith et al., 2000). It has long been suspected that certain types of violence are associated with one another, and many questions arise. Why does this association exist? Why do some individuals have greater propensity to persist in and even increase participation in violent incidents? These are just two of such questions. In the particular setting of an educational institution, this study has determined that the association between intimate partner violence and educator–student violence can be explained through the mediating effect of two variables: morbidity and diminished workplace performance. In effect, intimate partner violence produces physical and emotional harm which can diminish the work performance of educators, resulting in acts of negligence or error, in turn increasing the likelihood of conflict and violence with students whether as victim or perpetrator of such conflict. This hypothesis in the context of the educational institution presents an empirical consistency with diverse research performed in the business sector, where results consistently indicate a positive relation between intimate partner violence and the probability of conflict with colleagues, superiors in position of authority and customers, a consequence of presenteeism and workplace distraction after having experienced domestic violence (Vara-Horna, 2013).

Intimate partner violence also alters the psychological state of the victims, increasing their levels of anxiety, anguish, and anger (Campbell et al., 2002; Coker et al., 2000, 2002; Constantino et al., 2000; Ellsberg et al., 2008; Nixon et al., 2004; Pico-Alfonso et al., 2006; Plichta, 2004; Sutherland et al., 2002; Vung et al., 2009), with greater probability of perpetrating violence upon others. Decades of psychological research have found that violence can increase levels of emotional activation (irritation, anxiety, and frustration), creating a disposition toward greater aggressiveness toward others (Berkowitz, 2008; DeWall et al., 2011; Dollard et al., 1939; Finkel et al., 2009). This theory, known as frustration–aggression, can be applied to the schoolroom setting where the educator victim of intimate partner violence can become more given to quick irritation and less tolerant, judging acts of student indiscipline with greater severity thus increasing the likelihood of subsequent classroom violence.

The model presented in this study explains 11.2% of the variation in teacher–student violence. This indicates that many other variables are involved in its prediction and therefore it is necessary to continue studying this phenomenon. Nevertheless, the model explains a significant percentage of the variance accompanied by theoretical support which contributes to our understanding. This is the first empirical study of this subject, and the results originate in a Latin American emerging market with a low to middle average income; this makes it important to study this effect in other cultural contexts, national environments, and educational and income levels. It is also necessary to explore this phenomenon among male educators, given that we do not know what percentage of this group are perpetrators or victims of intimate partner violence, and how it affects their health and workplace performance, or how it predicts their participation in school violence.

Policy Implications and Prevention

Prevention of school violence has until now been centered on students, with abundant literature and recommendations on the promotion of safe schools, anti-bullying measures, limitations on physical punishment, and control of gangs, among others (Díaz-Aguado, 2005; Østby & Urdal, 2010; Tutty et al., 2005). On the other hand, the prevention of violence that directly affects the educator has been neglected, and in particular, the prevention of violence against women in an intimate partner relationship. This omission forms a sort of empirical and conceptual vacuum that weakens efficacy in the prevention of other types of school violence and in turn debilitates the overall educational function itself.

The prevention of intimate partner violence against female educators should be a concern of educational authorities and their institutions. The evidence reported here reveals a high level of prevalence of such violence with a pernicious influence on educators, their teaching performance as well as the care and well-being of students in their charge. Attention to this serious problem can create positive results reflected in improved physical and mental health of educators, higher levels of performance and care of students as well as reduced levels of teacher–student violence.

As for practical recommendations, the prevention of gender violence in the school setting would aid in ensuring the physical and emotional integrity of female educators. This could be accomplished by primary prevention procedures as well as creating institution mechanisms to identify and attend to potential cases of intimate partner violence as well as the health of its victims. At the micro level, prevention actions include providing information and training concerning intimate partner violence to administrative and teaching personnel in schools as well as awareness efforts among students and parents.

Furthermore, so that educators do not feel that this creates an interference in their private and personal lives, it may be necessary to update our understanding of the concept of the responsibilities of the educator, including renewed emphasis on development of such concepts as social and relationship skills among students, matters beyond the mere academic subject matter being taught. At the institutional level, schools should implement policies of zero tolerance of intimate partner violence in their codes of conduct as well as timely identification of such violence among their professional staff with referral to specialized professionals who offer support to its victims. Since female educators suffer high incidence of morbidity as a result of intimate partner violence, and this morbidity in turn has repercussions in the teacher–student relationship, it is urgent to give attention to the resulting negative effects, providing opportune attention to both educators, co-workers, and students.

Finally, this study should not be interpreted as “blaming the victim,” or the female educator victim of intimate partner violence, in the least. The data published here indicate the existence of an association between domestic violence and violence in the classroom, and therefore, this relation must be understood in order to address its roots and consequences, and to improve the quality of education and the well-being and health of society in general.

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Author Biographies

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