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RESEARCH ARTICLE

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Community and school violence as significant risk factors for school climate and bonding of teachers in Chile: A national hierarchical multilevel analysis

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Abstract

Community and school violence involve aggressive behaviors among youth and adults. Researchers have focused mostly on aggression among students without considering teachers as victims of violence. The study's purpose was to examine the consequences of community violence, school violence, and school climate on the levels of teacher's bonding to the school. We examined data of 5733 teachers from 510 schools in 68 different communities in Chile. We used Hierarchical Linear Modeling to examine the relationship between the individual, school, and community-level variables. We found direct associations with school bonding at the individual level for victim school violence, school climate, size and type of school, and violence in the community at the community level. Our results highlight the importance of school violence prevention from a comprehensive perspective, starting at the community level, followed by the school to provide more teacher's support.

KEYWORDS
bonding, community, school, teachers, violence

1 | INTRODUCTION

Community violence is a worldwide problem considering its negative effect for youth development, especially in the school context. Community violence can be related to more school violence against different members of the school. Teachers as victims of school violence have received little attention from researchers and policymakers. Yet, it can have a negative impact on their engagement to the school and therefore on their relationship with the students and achievement.

1.1 | School violence

School violence is a concept that can be understood from different theoretical backgrounds which include different types of aggressive behaviors (Espelage et al., 2013). When talking about types of aggression within school violence, there are different categories, points of view and theories to analyze them. Steffgen and Ewen (2007) categorize school violence in verbal attacks, terrifying call phones, damage of objects, assaults, aspersion, among others. Other categories that appear in the literature are violation of property, threats, sexual violence, stabbing, and others (Buck, 2006, Levin et al., 2006). Some researchers have made a more extreme definition, defining school violence as any crime that happens inside a school, such as thrust and/or beating (Daniels et al., 2007). Moreover, most definitions found in the literature focus on peer victimization and the impact of exposure to school violence. Not much is discussed about violence specifically directed towards teachers, yet, research about this subject has received increasing attention (Huang et al., 2017; Kapa & Gimbert, 2017; Le Mottee & Kelly, 2017; Maja et al., 2013; Reddy et al., 2013).

Teachers are nowadays regularly subjected to physical and verbal attacks at school, becoming a matter of public concern. Studies of violence directed against teacher evidence that 80% of them self-reported becoming a victim of violence in their workplace at least one time in the exercise of their profession (Dzuka & Dalbert, 2007; Wilson et al., 2010. The most extensive type of violence reported from teachers was covert violence, which can be understood as hidden ways to intimidate teachers, such as personal insults and nicknames (Wilson et al., 2010). Buck (2006) observed that 23% of teachers were victims of direct school violence, while 77% were victim of indirect violence. Some studies revealed that teachers minimize physical violence in school context and not all teachers report when they are victims of school violence (Emmerik et al., 2007; Khoury-Kassabri et al., 2009; McMahon et al., 2014.

School violence is a predictor of negative emotional and physical effects on teachers health and also foretells the level of efficiency of the teacher's duties (Wilson et al., 2010). One of the most typical negative effects is “burn out,'” referring to low self-esteem and negative emotional consequences (Buck, 2006). In addition, school violence has a significant impact, both in emotional well-being and professional bonding with the institution, increasing the number of teachers who want to leave the workplace (Galand et al., 2007). Moreover, there are negative consequences for the educational system itself, and the quality of education, having a negative impact on teacher abilities and therefore in students learning. Furthermore, several studies show school violence affects the learning of the students and school climate negatively (Furlong & Morrison, 2000).

Recent episodes of school violence in Chile highlight the increasing public attention that teachers have received as victims of school violence (Galdames & Pezoa, 2016). Morales et al. (2014) examined a sample of 319 teachers from 44 public schools with high levels of vulnerability at the community level, in one region in Chile. They found physical and psychological self-reported aggressions from students, teachers, parents and directives; against teachers during the last month. For instance, 39.9% of teachers reported being cursed by their students at least once a month and 29.8% mentioned being robbed by their students. Another example shows that 17.2% of teachers reported feeling humiliated by other teachers. Moreover, Galdames and Pezoa (2016) analyzed violence against teachers in Santiago. In this study, teachers from six different focus groups, described the negative

consequences of being victims of school violence, which were categorized by their emotional and professional effects. Some emotional consequences included anxiety, sleeping and eating disorders, demotivation and nervousness symptoms. Professional effects refer to the feeling of a lack of authority and leadership in the school community and sometimes turnover intentions (Galdames & Pezoa, 2016). The Superintendence of Education in Chile received in 2018, 100 formal complaints from teachers and assistants of education who reported being attacked by students and 167 formal complaints of aggressions by a student representative. This number is similar to 2017, where 263 formal complaints were submitted. Until the present, 94 complaints have been reported (Superintendence of Education, 2019). Another study conducted by the Ministry of Domestic Affairs and the Ministry of Education in Chile (2006) who had a sample of 3153 teachers and considered socioeconomic level of the schools where they worked, showed that the differences between schools with low and high socioeconomic level are statistically significant. The study showed that 50.4% of teachers who worked in vulnerable schools had been victims of psychological violence versus 39.6% of teachers who worked in private schools. A 3.1% declared physical violence versus 1.0% respectively (Ministry of Domestic Affairs and the Ministry of Education, 2006). In addition, previous studies have highlighted the relevance of risk factors from the community as significant predictor variable to explain violence from adolescents (Hartinger-Saunders et al., 2012; Herrenkohl et al., 2012).

Considering community violence and school violence as risk factors for teachers, few studies have been developed in Chile trying to recognize the effects on teachers bonding, while considering other variables, such as school climate. Because violence in schools is documented as a real problem, researchers need to examine this phenomenon and its consequences in teacher bonding and how school climate can moderate its effect, to prevent it.

1.2 | School climate

One important feature that defines school culture and its social environment is school climate. There is a wide range of terms and definitions regarding school climate which evidence its multidimensional nature (Thapa et al., 2013; Wang & Degol, 2015). Dimensions of school climate frequently found in literature include affective or more subjective aspects, such as students and teacher perceptions of the quality of peer interactions and student–teacher relations, among other factors that influence the school's social environment. There are also other objective dimensions which refer to school's characteristics, such as school rules and norms of behavior, learning practices, security, among others organizational dimensions (Thapa et al., 2013). A more recent review defines four domains: academic climate, community, safety and institutional environment, and thirteen dimensions for school climate, which highlights the complexity of this construct and its multidimensional nature (Wang & Degol, 2015). Considering school climate is a multifaceted construct associated with different domains representing the various aspects of school experience, this study focuses on three essential dimensions: School coexistence, interpersonal relationships and teacher–student relationship (Thapa et al., 2013; Wang & Degol, 2015). School Coexistence is the translation of the term "Convivencia Escolar" which is used in South America to refer to the quality of interpersonal relationships in the school context. It is defined as "the set of interactions and relationships that occur between all community actors (students, teachers, education assistants, directors, parents, guardians and supporters), including not only those between individuals, but also those that occur between groups (…) that are part of the institution." (Ministry of Education, 2019, p.9).

A review of literature regarding school climate (Cohen et al., 2009) indicates that the quality of school climate is related to and has particular relevance in the prevention of school violence and teacher retention, being both, subdimensions of two of the four major areas defined by Cohen et al. (2009) as elements that affect school environment. These two areas, safety and relationships, are related to school climate, as they alter the sense of well-being in a physically and/or in a social emotional way. In this sense, interpersonal relationships, and particularly factors, such as teachers receiving adequate support from other staff members and school administrators contributes to school climate and consequently, to teachers retention (Cohen et al., 2009).

Greene (2005) emphasizes that school climate has a large impact on the nature and scope of school violence, reporting an association between school climate and school violence. Results of a meta-analytic review of Steffgen et al. (2013) support this idea, indicating a moderating effect of school climate on the impact of school environmental factors on school violence and its consequences. As well, Eliot et al. (2010) concluded in their investigation that in school contexts where there is a positive student teacher relationship, students exhibit greater proactivity in response to bullying behaviors (e.g., asking for help from adults). Hence, a sense of community in which educators interact regularly with students and share norms and expectations is related to lower levels of problem behavior, especially in low socioeconomic contexts, where school climate could mitigate the negative impact of this variable on academic outcomes and school violence (Astor et al., 2009).

But not only a positive school climate serves to prevent school violence, it could also work as a protective factor against the negative effects of being exposed to different types of community violence. A recent study from Gaias et al. (2019) that used a sample of 1857 Colombian adolescentes, showed from that some aspects of school environment can protect students from the detrimental implications that violence can have on their development. This study confirmed that armed conflict, community violence victimization, and witnessing community violence are positively related with externalizing behaviors, and armed conflict is negatively associated with developmental competence. Also, they found that school safety, connectedness, and the availability of services moderate the association between witness community violence and present externalizing behaviors, and that school services moderates the relation between being a victim of community violence and developmental competence. In other words, as students reported a positive school climate, the effects of being exposed to violence were diminished.

Thus, a positive school climate can be a potent factor in moderating the effects of unsafety and violent environments. Whitlock (2006) suggests that teachers play a key role in helping create a positive school climate, which in turn, is a protective factor for youth from other risk factors, such as community violence. Therefore, understanding school climate may also help explain teachers differing experiences in the school setting which in turn, may affect their level of commitment and connection with the school. A recent study from Chang et al. (2017) on the relationship between well-being and teacher turnover intentions among teachers from rural elementary schools in Nantou County, Taiwan, reveals school climate had a moderating effect on the relationship between the two variables. The study indicates that support from co-workers, work supervision, and comradeship had a positive impact on climate and job satisfaction, and therefore had a significant and negative effect on turnover intentions (Chang et al., 2017).

Even though previous studies have examined the relevance of school climate for teacher bonding to school (Chang et al., 2017; Cohen et al., 2009), little research has also considered other contextual variables, such as community violence trying to better understand these relationships by using hierarchical methods, in the Chilean context.

1.3 | Teacher bonding

The relationship between students and teachers is a widely studied phenomenon in the educational world. Most studies have focused on how the relationship between students and teachers affect students, yet little is known of the impact of this relationship on teacher well-being. Relationships in the school context are studied under the term of school connectedness or school engagement (Chung-Do et al., 2015), but there is no concept in the literature that defines teacher's affective bond with the school community. García-Moya et al. (2018), offer a comprehensive approach about research related to school and teacher connectedness on literature published between the 1990s to 2016. They identified a great variability in the definition of the term school connectedness and only a small number of studies addressing the term teacher connectedness, conceptualized as the student's perception of teacher involvement and sense of caring (García-Moya et al., 2018). Hence, there is a need for further examination from the teacher's point of view, of the feelings and perceptions of student–teacher

relationships and community violence and how this affects their feelings of belonging and the repercussions it may have on their level of connectedness, turnover intentions and therefore in student achievement.

Definitions that may explain teacher bonding are engagement and burnout. Christian et al. (2011) define engagement as a relatively durable mental state in the investment of personal energy to work experience and performance. Moreover, engagement is related to self-efficacy, which means believing in one's own abilities to fulfill certain tasks. Teacher self-efficacy is a powerful motivational force associated with commitment to teaching, and resilience and it is inversely associated with turnover intentions (Klassen et al., 2013).

School environment provides multiple contexts that can lead to burn out as described by Pyhältö et al. (2011). Burn out is characterized by long-term work stress that implies emotional exhaustion, depersonalization and lack of personal achievements, generating exhaustion, and health problems (Brunsting et al., 2014). This affects the relationship of teachers with their school and has a negative impact on student academic results (Brunsting et al., 2014). In addition, Skaalvik and Skaalvik (2010) point out that burn out directly affects the turnover intentions and causes a negative relationship between motivation and exhaustion. Bergin and Bergin (2009), showed that teachers with a lower affective attachment to the educational institution in which they work, have a lesser quality bond with their students, negatively affecting the relationship between them and demonstrating a negative perception of teachers' connectedness. As a consequence, students would perceive less support from their teachers, and this would affect school climate, increase levels of conflict and violence behaviors.

According to Collie et al. (2011) there are two elements that predict a greater commitment of teachers: relationship with students and with teachers. One variable that affects the association between teacher-student relationship and teachers bonding in a negative way is socioeconomic status. It can be seen that low socio economic background is related with distant relationships between teachers and students (García-Moya et al., 2017). This is a problem, considering the findings of Spilt et al. (2011) which highlights the relationship of teachers with students as the most important source of motivation and joy for teachers and hence has an impact on teacher bonding. The second factor referred by Collie et al. (2011) is collaboration between teachers, since it promotes favorable relationships between professionals, creating a pleasant work space and support, which enhances greater teacher commitment. Due to the association that exists between the well-being of both, teachers and students, it is important to support teacher connectedness and, therefore, the quality of relationships between student and teacher (Harding et al., 2018). Yet, little is known of the effect of violence against teachers on teacher bonding, and the relation with other variables that could intervene, such as school climate and socioeconomic levels.

There are significant levels of inequality within the Chilean school system (Cornejo, 2006; Valenzuela et al., 2010). This is reflected in an unequal access to private education, and therefore in an unequal distribution of vulnerable students, especially students living in low-income communities, among public school dependencies (Cornejo, 2006; Valenzuela et al., 2010). One of the indicators used by the Chilean state to measure the degree of social vulnerability of schools, according to the socioeconomic background of the students, is the school vulnerability index (IVE; National Board of School Aid and Scholarships; Junta Nacional de Auxilio Escolar y Becas [JUNAEB], 2005). This index considers factors, such as the household head occupation status, parental educational level, students access to health services and household crowding, among others (Tijmes, 2012). Although there are few studies that analyze the effect of IVE on school climate variables, the existing evidence suggests that it is a relevant variable to be consider in this type of study. For example, Zepeda (2007) carried out a comparative analysis with a sample of 2168 students from 13 schools in the Metropolitan Region, in which he found that students from schools with a higher social vulnerability, measured through the IVE, perceived a more distant relationship with their teachers compared to their peers who were not in a vulnerable condition. In addition, other studies indicate that in schools with a high IVE, students report witnessing higher levels of school violence (teasing and disqualification, insults, robberies) compared to the national average (Tijmes, 2012). Taking this into account, IVE becomes a relevant factor to consider when analyzing variables, such as school climate and violence, which could consequently affect the well-being of students and teachers and teachers school bonding.

Therefore, the purpose of the study was to examine the effect of community violence, school violence and school climate on teacher bonding to the school, using hierarchical methods. Moreover, we examined if school climate can become a school protective factor from community violence and school violence.

2 | METHODS

2.1 | Data

We used a cross-sectional research design using data from the 4th National Chilean Survey on violence in school settings (ENVAE by its Spanish initials), conducted in 2014. ENVAE used a sampling procedure stratified by school, region, and grade level, collecting data from grades 7–12 across the country (Chile) based on a sampling error of ±1.0. Considering the nested effect of the data, we used a multilevel analysis approach (hierarchical linear modeling) to examine the multilevel influences on teacher bonding (Raudenbush & Bryk, 2002). Multilevel analysis is useful because it allows us to partition the variance across the three levels analyzed in this study (Level-3 community, Level-2 school, and Level-1 teachers) to better examine teacher bonding.

3 | MEASURES

3.1 | Individual level variables

3.1.1 | Individual control variables

We use as controls variables age (as a continuous variable), and teacher sex (dummy coded, female = 1).

3.2 | Teacher bonding

Our dependent variable asks teachers about their self-report assessment of the levels of bond to the school by asking about feelings of connection and proximity to the school and their members. This measure is based on the National Chilean Survey on violence in school settings. It uses a five-point Likert scale, where 1 "Very disagree" And 5 "Very agree," based on 3 items. The items are "How much do you agree or disagree with the following statements about your institution… I feel proud of my institution," "I would like to stay in this institution next year," and "I feel part of my school." The scale has high internal reliability (α = .92, Omega = .92) for the current sample. Due problems of normality with this variable (skewness = −1.89, kurtosis = 7.17) we recode by root square transformation. After calculating the average of the items on the bonding scale, both natural log and square root transformations were applied to reduce the severe positive asymmetry shown by the averages. The square root transformation showed better results (skewness = 0.39, kurtosis = 2.19) compared with natural log (skewness = 0.78, kurtosis = 2.90). Therefore, the analyses were conducted based on the square root scores. Thus, a lower value on the scale indicates more bonding of teachers to the school.

3.3 | Victim school violence

Our main individual predictor was the self-reports of teachers as a victim of school violence in the school. This scale was composed of nine items that assessed the self-report of being a victim of different types of aggression

from students in the school context, during the 2014 school year. It is measured through a Likert scale of five points, where 1 "Never" and 5 "Every day." Examples of items are "During this year 2014 and according to the following forms, how often has a student attacked you in your institution… Rumors with bad intention"; "…Threatening or harassing me"; "…Throwing me hard objects (case, backpack, eraser, chair, etc)"; "…Mocking or disqualifying (offensive nicknames, etc)." The scale has a good reliability indicator (α = .85, Omega = .90). A greater value of the scale indicates greater self-report of violence from students in the school context.

3.4 | School level variables (Level 2)

3.4.1 | Size

The national data set defined the size of the school in three levels. Thus 1 was coded for small schools, 2 for medium, and 3 for big. This criteria was defined by the Ministry of Education in Chile. The database used in this study was categorized according to these concepts.

3.5 | Type of schools

In Chile, there are different types of schools based on the way they are funded. In particular, there are three types of schools, labeled as 1 for public only, 3 for private only, and 2 for mix funding considering public and private.

3.6 | School vulnerability index

School vulnerability index (IVE by its Spanish initials) is a measure that captures the levels of vulnerability in the schools which can be considered as a proxy of student socioeconomic status in that school. IVE is a school index created by the Chilean Government to capture the degree of socioeconomic vulnerability of students attending publicly funded institutions (JUNAEB, 2005). The measure is percentage scores range from 0 to 100 whereas a higher value indicates the presence of more risk.

3.7 | School coexistence

School coexistence was measured by using a single item that assesses teachers self-assessment of the quality of school coexistence. This measure is also from the National Chilean Survey on violence in school settings. This measure is based on a Likert five five items responses (1 = very bad; 5 = very good). The item "The coexistence in your school is…". A higher value indicates a more positive self-assessment of the quality of the coexistence in the school.

3.8 | Interpersonal relationships

Interpersonal relationship is a composite variable of five items that evaluates or teacher's perceptions of the quality of interpersonal relationships among school members. This measure is also from the National Chilean Survey on violence in school settings. The composite is measured on a five-point Likert scale, where 1 "Very disagree" and 5 "Very agree." Examples of items are "How much do you agree or disagree with the following

statements about the relationship between students, teachers, and managers of your institution… Students have a good relationship with each other," "Teachers have a relationship of mutual respect with the students," "Teachers, supervisors, and principals have a good relationship between them." The scale has good internal reliability (α = .83, Omega = .86) for the current sample. A higher value on the scale indicates a more positive self-report of interpersonal relationships in the school.

3.9 | Teacher student relationships

Teacher–student relationship is a composite variable of four items that examined teachers' self-reports about the quality of the relationship between teachers and students in the school. This measure is also from the National Chilean Survey on violence in school settings. The composite is measured on a five-point Likert scale, where 1 "Very disagree" and 5 "Very agree." Examples of items are: "Most teachers support students who have problems"; "Most teachers trust their students." The scale has good internal reliability (α = .85, Omega = .87) for the current sample. A higher value on the scale indicates a more positive self-report of interpersonal relationships in the school.

3.10 | Community level measures (Level 3)

3.10.1 | Community violence

To capture the levels of community violence we used the national records of violent robberies in the community based on the national survey named "National Urban Survey of Public Safety" (ENUSC in Spanish). This measure represents the percentage of people that reported being a victim of a violent robbery in the community during the last 12 months. A higher score represents a more community violence period is missing.

In addition, CFA conducted with all multi-item scales showed satisfactory model fit indices: $\chi^2(183) = 2499.585$, $p < .001$, CFI = 0.92, TLI = 0.91, and RMSEA = 0.07.

4 | RESULTS

Table 1 summarizes descriptive results of the study variables at the teacher, school, and community level. Teachers self reports, on average, lower values of victim of school violence and higher bonding the the school. On average, teachers self-report lower values of becoming a victim of school violence and higher bonding the school. At the school level, all school climate variables have higher values, representing a positive school climate in the schools, but the school risk (IVE) is close to 60%. At the community level, violence represents a lower percentage on average in different communities. Table 2 describes correlations among study variables. All predictors have a significant correlation with our dependent variable (teacher bonding) with the hypothesized direction. The three school climate variables are correlated to each other, negatively correlated with becoming a victim of school violence. Finally, our community violence predictor is also correlated with all the other variables.

The results of the fully unconditional model indicate that the model estimates a between-school variance of 6.1%, on the levels of teacher bonding due to between school factors at level 2% and 1.9% at Level 3. Table 3 summarizes the results from the final model including all predictors. At the individual level we found a positive relationship between victim of school violence (b = 0.089, $p < .001$), and teachers bonding which indicate a lower bonding for teachers (lower values indicate higher bonding). Being the victim of school violence was positively associated with lower bonding for teachers, considering the square root transformation applied to this variable.

TABLE 1 Descriptive statistics

Variable	*N*	%	Mean	*SD*	Minimum	Maximum
Level 1						
Age	5733	-	41.05	11.92	20	80
Sex (female: 1)	5733	58.15	-	-		
Teacher bonding	5733	-	0.60	0.56	0	2
Victim school violence	5733	-	1.13	0.30	1.00	4.56
Level 2						
Size (small: 1)	510	33.14	-	-		
Size (big: 1)	510	9.22	-	-		
Type (mix: 1)	510	58.24	-	-		
Type (private: 1)	510	5.68	-	-		
School vulnerability index	510	-	61.30	23.11	0	94.34
School coexistence	510	-	3.88	0.49	2.44	5.00
Interpersonal relationships	510	-	4.01	0.33	2.90	5.00
Teacher student relationships	510	-	4.03	0.31	2.91	5.00
Level 3						
Community violence	68	-	21.81	5.49	6.40	34.70

In addition, all school climate variables were associated with teacher bonding: School coexistence ($b = -0.094$, $p < .001$), interpersonal relationships ($b = -0.291$, $p < .001$), teacher student relationships ($b = -0.126$, $p < .001$). These results indicated that higher teacher's bonding was associated with higher levels of school coexistence, interpersonal relationships, and teacher student relationships. At the school level we found a significant relationship for interpersonal relationship ($b = -0.404$, $p < .001$) and teacher student relationships ($b = -0.127$, $p < .001$) with bonding. Thus, teachers in schools showing higher levels of interpersonal relationship and teacher student relationships showed higher teacher's bonding. Small schools compared with medium size schools ($b = 0.045$, $p < .05$) showed lower teacher's bonding. Public schools showed higher teacher's bonding compared

TABLE 2 Correlation among study variables

	1	2	3	4	5	6	7	8	9
Age (1)	1								
Female (2)	−0.10***	1							
Teacher bonding (3)	−0.10***	0.01	1						
Victim school violence (4)	0.02	0.00	0.18***	1					
School vurnerability index (5)	0.04**	−0.01	0.12***	0.15***	1				
School coexistence (6)	0.01	−0.02	−0.36***	−0.27***	−0.30***	1			
Interpersonal relation (7)	0.04**	0.02	−0.50***	−0.24***	−0.15***	0.53***	1		
Teacher student relationship (8)	0.01	0.05***	−0.42***	−0.15***	−0.11***	0.38***	0.69***	1	
Community violence (9)	0.03*	0.00	0.08***	0.04***	0.09***	−0.06***	−0.05***	−0.03**	1

*$p < .01$.
**$p < .05$.
***$p < .001$.

TABLE 3 Between-school model of teacher bonding

Fixed effect	Coefficient	*SE*	*z*
Level-1 predictors			
Female	−0.005	0.013	−0.36
Age	−0.003***	0.0005	−4.70
Victim school violence	0.089***	0.022	4.11
School coexistence (deviation from school mean)	−0.094***	0.012	−7.97
Interpersonal relationship (deviation from school mean)	−0.291***	0.016	−17.77
Teacher student relationship (deviation from school mean)	−0.126***	0.014	−9.11
Level-2 predictors			
School coexistence (school mean)	−0.050	0.029	−1.70
Interpersonal relationship (school mean)	−0.404***	0.049	−8.33
Teacher student relationship (school mean)	−0.127***	0.039	−3.25
Size			
Small	0.045*	0.018	2.48
Large	−0.040	0.023	−1.75
Type			
Mix funding	0.151***	0.019	7.94
Private	0.148**	0.050	2.95
School vulnerability index	0.0013*	0.0006	2.27
Level-3 predictors			
Community violence	0.008*	0.003	2.55
Random effect	Variance component	*SE*	
Level-3	0.001	0.001	
Level-2	0.007	0.002	
Level-1	0.212	0.004	

*$p < .01$.

**$p < .05$.

***$p < .001$.

with private ($b = 0.148$, $p < .01$) and mix funding ($b = 0.151$, $p < .001$) schools. Teachers working in more vulnerable schools showed lower teacher's bonding ($b = 0.0013$, $p < .05$). Finally, at the community level we found that greater community violence was associated with lower teacher's bonding ($b = 0.008$, $p < .05$).

5 | DISCUSSION

Our results indicate that school factors, such as being a victim of school violence, teacher perception of school climate, and also, the percentage of community violence, impact the relationship that teachers have with their schools. All of these have an incidence in the bonding they feel with their place of work. These results evidence how factors from different levels, such as schools and communities can influence the individual variables, like teacher bonding.

Another important finding of this study is that teacher's that reported being victims of school violence presented job dissatisfaction and turnover intentions affecting their continuance commitment. So, it can be seen that being exposed to violence not only affects teachers' emotional level, with consequences, such as distress or

discomfort, but it also influences the relationship that they have with their work, which in turn, can affect class climate and student learning. This result is important because it highlights teachers as possible victims of school violence, specially considering that some teachers have reported not asking for help when they have been victims of violence (McMahon et al., 2014). Hence, providing more support to them in these cases should contribute to a more positive school climate for all members.

Moreover, community violence can affect the school environment, which can negatively influence students and teachers' well-being. For that, it is important to build school environments with the conditions to moderate or compensate for the negative effects that violence can have on individuals and communities, as Gaias et al. (2019) point out. Even in risky environments with high rates of violence, something can be done to diminish the negative impact of violence in individuals. Teachers have a crucial role in this (Whitlock, 2006) and in promoting a better school climate in those communities.

Another relevant finding is that different dimensions of school climate are related to higher levels of teacher bonding. For the purposes of the current study, the assessment of school climate is meant to be understood as the quality of school coexistence, teacher perceptions of the quality of interpersonal relationships among school members and the quality of the relationship between teachers and students in the school. These are all items measured in the National Chilean Survey on Violence in School Settings (Ministry of Domestic Affairs, Chile, 2014). Thus, this study highlights the importance of the factors that affects school climate not only for student wellbeing, but for teacher comfortless as well. Even though we found no cross level interaction effect, between school climate and community violence, it can still represent a compensatory protective factor for teacher bonding considering the results of the three-school climate measures.

The absence of cross level interaction effect among study variables can be interpreted by the nature of the school climate measures used in the analysis. In particular, safety is one feature of school climate (Wang & Degol, 2015) that was not included in the measurements and that can be directly related to community violence. Future studies should examine if this feature of school climate can moderate violence in the community. Yet, still the other school climate are important for teacher bonding.

Furthermore, studying teacher bonding is important for program prevention implementation. As described by Voight and Nation (2016) teachers and administrators' attitudes for program implementation are vital aspects of programs to improve school climate. The authors highlight this conclusion after a systematic review of the literature trying to recognize best practices for school climate, examining 66 different programs. Thus, the role of teachers and their bonding and wellbeing are also crucial for program implementation, consistent with previous studies of prevention programs (Gregory et al., 2007). For that, it is important to consider which factors affect the bonding and/or connectedness the teachers feel with their schools, and how these variables are related with other aspects of the school environments, such as different dimensions of the school climate. This is a possible way to inform educational policy about the aspects that are important to have in consideration for building safety, healthy and peaceful school environments. Although we examined community and school variables, teachers, and students well-being are school phenomenon for the most part which requires support from everyone, especially from school administrators (McMahon et al., 2014).

Regardless of the significant results we found in this study, there are some limitations. One limitation of this study can be the lack of consideration of multiculturality variables among teachers, such as race or ethnicity which can be related with violence against them. Future research could advance the study of the phenomena by incorporating these factors. Another limitation of this study in cross sectional nature of the sample. Thus, it could be relevant to include longitudinal samples, so it can be investigated how the variables in study remain or change through time or the life cycle. Despite this nature, this sample of this study is large and includes teachers from different regions of the country, which is a useful contribution to the study of the relationship among school climate, violence against teachers and teacher bonding. Another limitation is the use of self-report methods from teachers as the only informant of the study variables at Level 1, and also, the use of a single item for the School Coexistence measure. Even though this can be a problem, we complemented our database with other data at

school level and community level, and also, decided to keep all the measures used by the Ministry of Education in Chile. Moreover, even though we used the HLM method to account for the group variance, our ICC results were relatively small. Lastly, we used gender and age as control variables, other studies could further examine whether these two demographic aspects differently explain teacher bonding based on school and community variables.

Despite previous limitations, this current study contributes to the existing literature by highlighting the effect of violence in the community and school violence against teachers. This study in Chile uses hierarchical methods with three levels of analysis, to shed light on how school climate and school violence can have a negative impact on teachers bonding to school and in their continuance commitment, therefore affecting students' learning and achievement. It is a highly relevant theme for school communities and studies do not normally address it from teachers perspective nor the consequences it may have in teachers turnover intentions. School management should take this into account to respond to teachers' concerns and ensure a positive school climate and safe environment, considering the implications it has in educational practices and the whole teaching and learning process.

CONFLICT OF INTERESTS

The authors declare that there are no conflict of interests.

PEER REVIEW

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DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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