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School Climate, Bullying and Mental Health among Chilean Adolescents

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Abstract

Bullying among adolescents is associated with different mental health issues, for both victims and aggressors. This association has been evidenced in different contexts, but its relationship to other aspects of schooling, such as school climate, have not always been considered. The purpose of this study was to examine how school climate—as perceived by students—is associated with the roles of victim and aggressor in bullying situations, and problems of internalizing and externalizing behaviors among adolescents. To this end, a sample of 366 adolescent students were asked to self-report on school climate; bullying in terms of victimization and aggression; and internalizing and externalizing behaviors. A negative association was evidenced by means of structural equations between school climate and victimization, as well as a positive association between victimization and internalizing behaviors. A positive relationship was found between bullying aggression and externalizing behaviors, although school climate did not predict aggression levels. These results reinforce the importance of considering schooling dimensions to understand bullying and its consequences on the mental health of adolescents, particularly for bullying victimization and its relation to internalizing behaviors.

Keywords Bullying · School climate · Mental health · Internalizing behaviors · Externalizing behaviors

Bullying behavior, understood as a form of repetitive aggressive behavior with an imbalance of power aimed at harming another (Olweus & Limber, 2010), has negative consequences for the mental health of victims and victimizers, including internalizing and externalizing symptoms, and even suicidality (Eastman et al.,

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2018; Kelly et al., 2015). The focus has often been placed on the victims of bullying, since it is believed that they are the ones with the greatest risk to their mental health because of repeated aggressions over time, without the possibility of defending themselves (Espelage & Swearer, 2003). On the other hand, research has also observed that being a bully and perpetrating aggressive behaviors towards peers can have equally negative consequences, and particularly a higher prevalence of externalizing behaviors (Mark et al., 2019). Regardless of the role in the bullying situation a student takes, he or she will suffer significant short-term and long-term consequences on his or her mental health, understood both as the absence of psychopathology and as a state of personal, psychological, cognitive and social well-being (Manwell et al., 2015). Considering bullying as a school phenomenon, school-related variables like school climate can also be relevant to understand and prevent violent behavior (Kutsyuruba et al., 2015; Waasdorp et al., 2012). Yet there has been little research into the relationship between school climate, bullying and its negative effect on adolescent mental health, which is the purpose of this study.

1 Mental Health During Adolescence

Mental health is an ongoing concern given its importance for wellbeing and the optimal social and psychological functioning of individuals, especially for children and adolescents (Patton et al., 2016; World Health Organization [WHO], 2005). Promoting positive mental health among adolescents has been the focus in recent decades of many public policies, with greater development in European countries (Hendriks et al., 2020) and less progress in middle-income and low-income countries (Zhou et al., 2020). Despite this interest, as reported by Belfer (2016), only 7% of the countries in the world have policies aimed at intervening in mental health-related problems.

Externalizing behaviors are defined as the proclivity to manifest stress externally (Cosgrove et al., 2010; Furlong et al., 2004). This type of behavior includes difficulties in maintaining concentration and self-regulation, frequently associated with attention deficit and hyperactivity (Furlong et al., 2004). Externalizing behaviors include aggressive, antisocial, and other types of uncontrolled behavior, frequently evidencing oppositional-type disorders, behavioral disorders, substance abuse and antisocial personality disorders (Colder et al., 2017). This type of behavior is more commonly observed among men than women (Carragher et al., 2015), although it affects both (Eshrat, 2016). Studies indicate that the presence of externalizing problems in childhood tends to persist over time. For example, a longitudinal study that followed the trajectories of externalizing behaviors of 2,076 children for 24 years found that this type of behavior is associated with disruptive behaviors in adulthood (Reef et al., 2010). Externalizing behaviors in childhood have also been associated with substance abuse and criminal acts during late adolescence (Scalco et al., 2014).

Internalizing behaviors are defined as the propensity to internalize stress (Cosgrove et al., 2010). This type of behavior commonly includes symptomologies associated with mood and anxiety disorders and feelings of inferiority, shyness, and hypersensitivity, as well as somatic complaints (Gresham & Kern, 2004). This type

of behavior is observed more often in women than in men (Carragher et al., 2015). Internalizing behaviors have been observed to lead to later difficulties in various areas, such as increased probability of major depressive disorders, suicidal behavior, psychiatric hospitalization, somatic symptoms and problems associated with sleep and eating (Liu et al., 2011). In the context of schools, internalizing behaviors are associated with low self-esteem, poor academic performance and problems of communication with peers and teachers (Sang & Tan, 2018).

Although externalizing and internalizing problems have been studied separately, that is, as "pure" profiles, the co-occurrence of these symptomologies has also been observed (Willner et al., 2016). Several studies have reported associations between these two profiles that range between 0.16 and 0.58 (Cosgrove et al., 2010; Lee & Stone, 2011; Willner et al., 2016). It is important to consider the association between externalizing and internalizing problems in order to understand them more deeply, both in terms their prediction and their consequences (Willner et al., 2016).

Among Latino populations, externalizing and internalizing behaviors have been increasingly important given the significant increase in the presence of Latino children and adolescents in different countries around the world (Coohey et al., 2013; Ramírez et al., 2017). Despite the growing interest in studying internalizing and externalizing behaviors among adolescents, there are practically no studies on the subject in Latin America. A study involving Peruvian students between 12 and 18 years old sought to identify externalizing and internalizing behaviors. The study found that females presented more internalizing symptomatology (depressive and anxiety-related symptomology and somatic complaints) than did males. The study also found that males scored higher than females on externalizing behaviors and rule breaking (Alarcón & Bárrig, 2015).

In Chile, Rojas et al. (2011) conducted an epidemiological study with adults and children/adolescents in which they found that the latter have a higher prevalence of mental disorders than adults (32% versus 14.2%) according to the perceptions of their caregivers. Some studies have focused on the mental health characteristics among a school population by measuring externalizing and internalizing behaviors (Gallardo et al., 2015; Leiva et al., 2015; Rojas et al., 2011), highlighting the importance of interventions to promote positive development among adolescents and to reduce aggressive behaviors in school (Gallardo et al., 2015; Leiva et al., 2015).

Considering the importance of adolescent mental health, there have been few studies on the role of interpersonal and contextual variables in the school environment, such as peer aggression and the school climate, in explaining externalizing and internalizing-mental health problems.

2 Bullying and Mental Health

Bullying is one of the most important problems affecting the health and well-being of young people around the world, with reported rates internationally between 10 and 50% (Currie et al., 2012). A bibliographic review of 234 research articles dealing with Latin American populations found a prevalence of bullying

of between 20 and 30%, which is consistent with what has been reported for Europe and the United States (Herrera-López et al., 2018).

Sigurdson et al. (2015) found that students that had been involved in bullying situations were more likely to have mental health problems in adulthood than those who had not been exposed to bullying. Bullying has also been found to have negative consequences on the mental health of victims and victimizers, including internalizing and externalizing problems (Eastman et al., 2018; Kelly et al., 2015).

According to Eastman et al. (2018), there is evidence that when individuals are faced with frequent victimization they are more likely to present internalizing behaviors. A study by Kelly et al. (2015) involving a sample of 1,588 from 7 to 9th grade Australian students found an association between higher levels of internalizing problems and a tendency to be victimized by bullying. Similarly, a meta-analysis by Ttofi et al. (2011) found that people who had been bullied at school were more likely to present internalizing problems, such as depression, than those who had not been involved in this type of aggression ($OR = 1.99$; CI [1.71, 2.32]).

However, other studies have reported that the presence of symptomology of an internalizing type is associated with both victims and victimizers (Reijntjes et al., 2010). Lovegrove and Cornell (2013) conducted a study with 4,352 ninth-to-twelfth-grade students from two public schools in the United States. They found internalizing-type problematic behaviors among adolescents that were victims of bullying and among those that were in turn victims and victimizers.

It has been indicated that bullying is a form of problematic externalizing-type behavior (Bradshaw et al., 2013), and that this type of behavior is more evident among adolescents who bully their peers and those who are victims and victimizers (Lovegrove & Cornell, 2013).

Numerous international and Latin American studies have sought to improve our understanding of the relationship between bullying and internalizing and externalizing behaviors. A study in Italy with a sample of 1,311 from the 3rd to the 8th grade students found that the symptoms associated with internalizing and externalizing behaviors, conflict between teachers and students, and negative expectations towards teachers were positively associated with experiences of victimization at school (Marengo et al., 2019). Based on a sample of 3,042 Nicaraguan primary school boys and girls, it was found that presenting externalizing problems, such as antisocial behaviors and drug use, was significantly related to being an aggressor (Romera et al., 2011).

As has been observed, bullying is related to adolescent mental health in terms of internalizing- and externalizing-type consequences. However, there have been few studies in Chile that relate internalizing and externalizing behaviors to bullying. A study by Carmona-Torres et al. (2015) found that being a victimizer is associated with drug use, while being a victim of bullying is associated with eating disorders. Leiva (2014) found that victims of harassment are more likely to present depressive and anxiety-related symptomatology than individuals who had never been victimized. Despite these advances, we found no studies that associate externalizing and internalizing behaviors with bullying and school climate.

3 School Climate and Bullying Behavior

Close to 150 million students between the ages of 13 and 15 years worldwide have experienced some type of violence by their classmates, either within or outside of their schools (United Nation Children's Fund [UNICEF], 2018), representing a complex panorama in terms of school climate in educational communities. School climate refers to the character and quality of school experience and includes several elements such as relationships with the school community, the quality of teaching and learning, and school organization (Wang & Degol, 2016). Likewise, the literature indicates that school climate is a multidimensional construct that is composed of 5 dimensions: safety, relationships, teaching and learning, institutional environment, and school improvement process (Thapa et al., 2013). Specifically, it has been observed that feeling safe at school, feeling connected at school, and peer and school community support would be factors of school climate that would positively impact the mental health and well-being of children and adolescents (Lester & Cross, 2015). In relation to Latin America and the Caribbean, a study involving 16 countries found that 51.1% of 6th grade students had experienced some episode of violence in the previous month. Cuba presented the lowest percentage of violence of all types within the school at 13.2%, while Colombia presented the highest percentage of school violence at 63.1% (Román & Murillo, 2011).

According to a recent study about school violence in Chile—the Poly-Victimization Survey (Consejo Nacional de la Infancia, 2018)—twenty-nine percent of 4th and 7th grade students have experienced some form of violence by classmates. According to the 4th National Survey on Violence in the School Environment (ENVAE, 2014), 43.5% of students reported violence in their schools as a daily or least weekly occurrence.

A negative climate can affect the perception of safety within the school and reinforce problematic behaviors such as bullying (Bosworth & Judkins, 2014). In contrast, students that experience a positive school climate report fewer experiences of physical, emotional or cyber bullying (Acosta et al., 2018; Varela et al., 2019) with the establishment of standards of positive behavior (Lawrence, 2017). Students who attend schools that provide supportive peer relationships, clear rules and a greater sense of safety are less likely to report being victims or victimizers of bullying (Konishi et al., 2017). Likewise, it has been found that knowledge of school rules and recognition by students that adults can intervene in school violence is associated with fewer reports of bullying (Låftman et al., 2016).

Several studies have found an association between school climate and student mental health (Aldridge & McChesney, 2018; Cowie & Colliety, 2018; Kutsyuruba et al., 2015; Lester & Cross, 2015; Reaves et al., 2018). A systematic literature review found that positive relationships with teachers and peers that involved respect, connection, support, positive attitudes towards diversity, and the absence of intimidation or victimization are associated with increased adolescent psychosocial well-being and preventive behaviors, as well as a lower prevalence of mental health problems and risk behaviors (Aldridge & McChesney, 2018). Along the

same lines, a meta-analysis by Reaves et al. (2018) focused on longitudinal studies exploring the relationship between school climate and behavior, and found that follow-ups of between 6 months and 2 years revealed relationships between school climate and problematic behaviors, especially between characteristics of the institutional environment, interpersonal relationships within the school and the presence of behavioral problems.

Cyberbullying can be considered an extension of bullying in other contexts. A combination of bullying and cyberbullying seems to be harmful to adolescent mental health. Previous studies with adolescent victims of both types of behaviors (range age 13 to 16) linked the presence of depressive symptoms, particularly in girls, increasing the probability of psychosomatic problems (Landstedt and Persson, 2014).

Students who experience cyberbullying are at greater risk of making suicide attempts and experiencing depressive symptoms, especially in women (Bauman et al., 2013). However, Brailovskaia et al. (2018) conclude that positive mental health can mediate the effect of cyberbullying on suicidal ideation and behavior. A recent meta-analysis carried out by Marciano et al. (2020), based on 56 longitudinal studies on the long-term effects of cyberbullying, concluded that children and adolescents who present long-term cyberbullying behavior present externalizing symptoms more frequently. On the other hand, being a victim of cyberbullying was a risk factor for the long-term presence of internalizing symptoms, particularly for anxiety and depression. In addition, the presence of behavioral problems and increased frequency of Internet use predicts cyberbully behaviors. In the same way, depressive and anxious symptoms and more frequent Internet use are predictive of being a victim of cyberbullying.

Considering the characteristics of the school context is relevant to understanding bullying and school-related mental health because it allows us to understand how the variables associated with the school context can offer ways to prevent bullying and school violence, and the consequences these experiences can have for students (Kutsyuruba et al., 2015; Waasdorp et al., 2012). Despite the importance of school climate, there have been few studies in Chile that examine the relationship between school climate, bullying and their effect on adolescent mental health. Based on the available literature review, we hypothesize negative associations between school climate and the roles of victims and victimizers of bullying, and with internalizing and externalizing behaviors. A positive association is expected between the role of victim of bullying and internalizing behaviors, and a positive association is expected between the role of victimizer and externalizing behaviors.

4 Method

4.1 Sample

Convenience sampling was carried out, reaching the participation of 11 public and private urban schools in Santiago de Chile. A sample of 366 adolescents between 9 and 16 years of age (average 11.82 years; 45.6% women) was used. Data were

collected using self-reporting questionnaires collected in the classroom, under the guidance of a psychologist from our research team. On average, an hour was required to complete the questionnaire. The data collection method was approved by the Ethics Committee of *Universidad del Desarrollo* and included an active consent of school authorities and the students, as well as the passive consent of parents and guardians.

4.2 Measurements

4.2.1 School Climate

The school climate scale (α = 0.74) was composed of four self-reported items based on the ISCWeB Project (Children's Worlds, 2013), which measure students' evaluation of their relationship with teachers and peers, and the degree of care and closeness to each other. Students answered by identifying their degree of agreement with the items based on a five-point Likert scale (1 = Totally disagree; 5 = Totally agree). The items are: "My teachers care about me"; "My teachers listen to me and take into account what I say"; "If I have a problem at school, other children will help me"; "If I have a problem at school, my teachers will help me". A higher score indicates a more positive evaluation of school climate.

4.2.2 Victim

The role of victim of bullying scale (α = 0.87) was based on the Illinois Bullying Scale (Espelage & Holt, 2001). This scale was composed of 4 items that measure the frequency of having been the victim of different types of bullying in the previous month. Participants were asked if they have been victims of different types of aggression based on a Likert scale (1 = Never; 4 = Almost always). The items are: "In the last 30 days: I have been beaten or pushed by other students"; "Other students have laughed at me"; "Other students have teased and annoyed me"; "Other students call me nicknames". A higher score indicates more victimization by bullying.

4.2.3 Aggressor

The role of aggressor of bullying scale (α = 0.86) was based on a self-reporting bullying scale with 5 items (Illinois Bullying Scale, Espelage & Holt, 2001). The different items on the scale measure the frequency of harming or intimidating other classmates during the previous month using a Likert scale (1 = Never; 4 = Almost always). Examples of questions are: "In the last 30 days: "I have threatened, beaten or injured other students"; "I have fought with students that I can easily beat"; "I have gotten into a fist fight when I've been angry"; "I have hit back when someone has hit me first". A higher score indicates a higher frequency of bullying behaviors.

4.2.4 Internalizing Problems

The scale of internalizing problems (α = 0.74) was based on the Pediatric Symptom Checklist for Adolescents (Murphy et al., 2016). It was composed of 5 items that measure the frequency of behaviors that participants indicate using a Likert scale (1 = Never; 3 = Often). Examples of items are: "Please mark under the heading that best fits you: Feel sad, unhappy"; "Worry a lot"; "Feel hopeless"; “You feel small”. A high score indicates internalizing behaviors are more common.

4.2.5 Externalizing Problems

The scale of externalizing behaviors (α = 0.72) was based on the Pediatric Symptom Checklist for Adolescents (Murphy et al., 2016). It was composed of 7 items that measure the frequency of behaviors that participants indicate using a Likert scale (1 = Never; 3 = Often). Examples of items are: "Please mark under the heading that best fits you: Blame others for your problems"; "Do not understand other people’s feelings"; “You ignore the orders”; “You take other people’s things”. A higher score indicates externalizing behaviors are more common.

5 Results

Table 1 describes the mean, standard deviation, range, number of respondents, and correlations between the measures used in the study. In order to evaluate our hypothesis we used structural equation modeling (SEM) in Mplus (Muthén & Muthén, 2017), using the default treatment for missing data (FIML; e.g. Enders, 2001); the lowest covariance coverage in our data was 90.7%, with 93.1% on average (SD = 1.6%). In order to account for the non-normality of the data, we used robust maximum likelihood estimation (MLR; e.g. Li, 2016). Because of our research

Table 1 Descriptive Statistics and Zero-Order Correlations

	Mean (SD)	Range	N	(1)	(2)	(3)	(4)
School Climate (1)	3.79 (.97)	1—5	339	-			
Victim (2)	2.01 (.88)	1—4	324	-.16***	-		
Aggressor (3)	1.54 (.69)	1—4	325	-.08***	.47***	-	
Externalizing (4)	1.49 (.36)	1—3	325	-.13***	.36***	.57***	-
Internalizing (5)	1.72 (.47)	1—3	325	-.15***	.42***	.25***	.45***

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

question, we chose not to include two of the items of the original scale of externalizing behaviors that were too closely related to bullying: fighting with other classmates and bothering/making fun of other classmates.[1]

Our model was developed based on the theoretical hypotheses stated at the end of the introduction: it includes school climate as the main predictor, the reports of being victim or aggressor in bullying situations as mediators, and internalizing and externalizing behaviors as dependent variables. Based on the previous literature, we hypothesized that school climate would predict higher frequencies of both victim and aggressor situations, which would in turn predict internalizing and externalizing behaviors respectively. The direct paths from school climate to internalizing and externalizing behaviors were also estimated in the model.

We also included gender and age as statistical controls, which were allowed to correlate with school climate and used as predictors of the mediators and the dependent variables. Overall, the model provided a good fit to the data $x^2(256) = 392.3$, $p < 0.001$; CFI = 0.94, TLI = 0.93, RMSEA = 0.039, 90% CI [0.031, 0.047], SRMR = 0.05.

The standardized results of the SEM model are available in Fig. 1, and were in general consistent with our hypothesis, supporting the idea that school climate may influence mental health of adolescents by promoting more positive relations between students. As expected, internalizing problems and externalizing problems were positively correlated ($r = 0.54$, $p < 0.001$), and so were being the victim and being the aggressor in bullying situations ($r = 0.47$, $p < 0.001$).

Most importantly for our research objectives, a more positive school climate was predictive of a lower frequency of being the victim of bullying behaviors ($\beta = -0.15$, $p = 0.02$), which in turn was a strong predictor of lower levels of internalizing problems ($\beta = 0.50$, $p < 0.001$), and also a marginally significant predictor of externalizing problems ($\beta = 0.14$, $p = 0.057$). The specific indirect effect of school climate on internalizing problems via frequency of being the victim of bullying was also statistically significant ($\beta = -0.07$, $p = 0.025$).

School climate did not predict the frequency of being the aggressor in bullying behaviors ($\beta = -0.01$, $p = 0.91$), but being the aggressor did predict our mental health indicators as expected. It was a much stronger predictor of higher levels of externalizing problems ($\beta = 0.59$, $p < 0.001$) than internalizing problems, where the relation was not statistically significant ($\beta = 0.12$, $p = 0.124$).

Finally, the results regarding the statistical controls are also interesting. As has been observed in previous studies, internalizing problems were less prevalent for boys ($\beta = -0.31$, $p < 0.001$), and boys were also more likely to be the aggressor in bullying situations ($\beta = 0.16$, $p = 0.009$). Older students were less likely to report being the victim in bullying situations ($\beta = -0.17$, $p = 0.002$). Overall, the model predicted 39.9% of the variance of internalizing problems, and 44.6% of the variance of externalizing problems.

[1] The results are substantially the same with these items included, but the fit to the data is slightly worse (CFI = .93) because these items are more strongly correlated to bullying than the rest of the scale.

6 Discussion

Our results confirm the negative effects of bullying on the mental health of young victims and victimizers. Moreover, our results indicate the importance of the school climate, especially for victims, and confirm the association between presenting internalizing behaviors and being a victim of bullying (which is also negatively associated with school climate), and the association between presenting externalizing behaviors and being a victimizer of bullying, although school climate did not predict externalizing behaviors.

Such results highlight the importance of school climate as a risk factor for victimization. As we know, there is evidence supporting the link between school climate and victimization (Marengo et al., 2019); just as positive school climate has been found to be associated with lower reports of being bullied (Acosta et al., 2018; Låftman et al., 2016; Varela et al., 2019).

On the other hand, although it has been found that a worse school climate has been associated with behavioral problems, including bullying (Bosworth & Judkins, 2014; Reaves et al., 2018) and that a positive school climate has been associated with a lower probability of being a victimizer (Konishi et al., 2017), our results did not find such a relationship. Against this, we can hypothesize that our results are due to the specific focus on *care and support* in our school climate scale, which potentially excludes other relevant aspects of school climate and of the individuals who present bullying behaviors. For example, the perception of safety at school, the role played by witnesses, and the attitudinal climate of reinforcement bullying behaviors by the environment (Bosworth & Judkins, 2014; Cowie & Colliety, 2018), which could interact with individual risk factors, such as the need to seek acceptance from the peer group and the need for bullies to alleviate their own vulnerabilities (Cowie & Colliety, 2018). It has also been found that physical health would be a risk factor for bullying (Waasdorp et al., 2019), reflecting the complexity of the phenomenon in explanatory terms.

So far, the literature linking victim and aggressor roles to internalizing and externalizing problems is inconclusive: Some studies associate victimization with internalizing problems (Eastman et al., 2018; Kelly et al., 2015; Ttofi et al., 2011), while others associate these problems with different roles, i.e., victims, victimizers, and victim-victimizers. On the other hand, victim-victimizer and victim-victimizer roles are associated with externalizing problems (Lovegrove et al., 2013; Reijntjes et al., 2010). Nevertheless, our results add to the support of a unique link between victimization and internalizing problems, as well as between bullying and externalizing problems.

Notably, Aldridge and McChesney (2018) posit that while there are even though some literature reviews highlight the importance of school climate for mental health, they do not directly examine how school climate affects adolescent mental health. Thus, our study contributes to the understanding of the relationship between school climate and mental health problems, specifically, by highlighting our results the role of bullying and school victimization problems on students' mental health as a key mechanism for the influence of school climate in mental health.

The relationships found in this study highlight the complexity of bullying behavior and indicate the need for mental health support for adolescents. They also reinforce the importance of school climate to better support students and prevent bullying in the school. Interventions aimed at improving school climate, and thus improve the lives of both students and teachers, can prevent bullying (e.g., School-Wide Positive Behavioral Interventions and Supports—SWPBIS; Dowdy et al., 2014; Varela et al., 2009; Waasdorp et al., 2012).

There is a national program in Chile that works at the local level in diagnosis and coordination of interventions for improving mental health, working with parents and teachers (*Abilities for Life*, Junta Nacional de Auxilio Escolar y Becas [JUNAEB], 2020). However, this program is only directed at pre-school and primary school children in high risk situations (JUNAEB, 2020), excluding adolescents and those defined as not presenting social vulnerability.

Chile also has a National Policy for School Life that covers different school levels (Ministry of Education [MINEDUC], 2019). Although the policy addresses everyday situations that require specific intervention, such as situations of violence, it does not incorporate the associated mental health problems. This is especially important in the national context considering more extreme problems associated with suicidal behavior among adolescents (Bornstein et al., 2010; Liu et al., 2011; Marsh, 2015).

Considering the opportunities and challenges to develop interventions that address the close relationship between mental health, climate, and bullying, it is necessary to develop an intervention model that involves school settings, including school climate and bullying concerning mental health problems. In addition, it can cover different stages of development, including adolescence. The idea is that the model includes the entire school community, promoting positive school climates for the development of students, with the ability to detect adolescents involved in bullying situations (both victims and perpetrators) early, intervene to stop these types of experiences, and provide timely support to lessen the effects of bullying on mental health.

Given that adolescence is one of the most important transition periods in human life, characterized by accelerated growth and changes, exceeded in this only by infancy (WHO, 2020), it is necessary to continue studying and furthering our knowledge of the experience of adolescents in terms of school climate, bullying and mental health. In particular, future studies can explore new forms of aggression such as cyberbullying and its consequences on adolescent mental health. Moreover, program mental health evaluations constitute another significant gap in Chile and Latin America in general. We need to increase our knowledge about what works to prevent bullying, promote school climate, and support adolescents.

Despite the significance of our results, there are limitations to this study that should be mentioned. First, the analyses were based on cross-sectional data that partly limits the conclusions that can be drawn from the association between the variables. This is especially important considering the negative long-term effects on adolescent mental health. Future studies based on longitudinal designs should consider different adolescent developmental trajectories, mental health, and school experiences, such as school climate and bullying. A second limitation of the study

was the use of a convenience sample, with its concomitant difficulties in establishing how representative it can be of the diversity of the Chilean population. Related to this, our sample only included schools in urban areas, and thus our results cannot be extrapolated to a rural context. Although the majority of students in Chile attend urban schools, future studies should include rural schools to compare bullying and school climate related to adolescent mental health. Lastly, we used gender as a control variable for the study but did not have a large enough sample size to explore if the relations between our variables are comparable for boys and girls. These relations may well be different, considering the gender differences observed in this study—as well as previous research—regarding the roles of victim and victimizer in bullying situations, and regarding internalizing and externalizing behaviors.

Despite the aforementioned limitations, we found significant results relating to Chilean adolescents. In particular, our study sought to explain the influence of the school climate on group dynamics such as bullying behavior and its influence on mental health problems at the individual level through two distinct manifestations, internalizing and externalizing problems. Thus, our results highlight an intrinsic relationship between adolescent mental health, relationships with peers and contextual aspects of the school like the school climate. Based on these results, we believe the development of guidelines for the promotion of a positive school climate should pay special attention to bullying and mental health in general, but particularly to establishing a protective environment that prevents victimization and its concomitant internalizing behaviors.

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Declarations

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