

Factors Associated with School Bullying in Cartagena-Colombia: Analysis from the Victim's Role

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Theme: Care processes and practices

Contribution to the discipline: The present study shows the factors associated with school bullying from the victim's perspective, demonstrating that the school is a favorable environment for promoting students' mental health. This represents an opportunity for nursing professionals to intervene in these settings, considering that it is currently an area of practice that has been little explored by nursing and has recently become a topic of increasing interest for intervention.

Abstract

Introduction: Bullying is frequently observed in school environments, which directly affects children and adolescents; hence, the identification of factors involved in the occurrence of this phenomenon is required. **Objective:** To determine the risk factors associated with bullying among students from two public educational institutions in Cartagena, from the victim's perspective. **Method:** A cross-sectional analytical study was conducted among 656 students from sixth to ninth grade, aged between ten and eleven years. Students with school absenteeism during data collection were excluded. A stratified sampling was conducted by proportional allocation. The Bullying Screening Questionnaire, the Rosenberg Self-Esteem Scale, the Family APGAR, the Family Violence Scale, the School Climate Scale, and the Authoritarian Attitude Questionnaire were used. A multivariate analysis was performed using the odds ratio (OR). **Results:** Risk factors identified included having an authoritarian attitude [4.7% (OR = 9.464)], experiencing severe or moderate family violence [16.2% and 0.6%, respectively (OR = 3.422)], having high self-esteem [5.2% (OR = 1.980)], and living with both parents [47.7% (OR = 1.359)]. Additionally, being from socioeconomic strata 3, 4, or 5; being male; belonging to a functional family; experiencing a positive school climate; and living with 4, 5, 6, or more people in the household were identified as protective factors. **Conclusions:** The factors associated with bullying identified highlight an opportunity for nursing intervention aimed at promoting mental health and fostering respectful treatment in schools, a field currently underexplored by these professionals.

Keywords (Source: DeCS)

Bullying; risk factors; schools; mental health; students.

4 Factores asociados al acoso escolar en Cartagena-Colombia: Un análisis desde el rol de la víctima

Resumen

Introducción: el acoso escolar se observa con frecuencia en los entornos escolares, lo que afecta directamente a los niños, niñas y adolescentes; por consiguiente, identificar los factores involucrados en la ocurrencia de este fenómeno es necesario. **Objetivo:** determinar los factores de riesgo asociados al acoso escolar entre estudiantes en dos instituciones públicas en Cartagena, desde la perspectiva de la víctima. **Método:** Se realizó un estudio transversal con 656 estudiantes de grados sexto a noveno, con edades entre los 10 y 11 años de edad. Los estudiantes que presentaron ausentismo escolar durante la recolección de datos fueron excluidos. Se realizó un muestreo estratificado mediante distribución proporcional. Se utilizaron el Cuestionario para la exploración del acoso escolar, la Escala de autoestima de Rosenberg, el APGAR de familia, la escala de violencia familiar, la Escala de clima escolar y el Cuestionario de actitud autoritaria. Se llevó a cabo un análisis multivariante, usando el odds ratio (OR). **Resultados:** Los factores de riesgo identificados incluyen tener una actitud autoritaria [4.7% (OR = 9.464)], experimentar violencia familiar severa o moderada [16.2% and 0.6%, respectivamente (OR = 3.422)], tener una autoestima alta [5.2% (OR = 1.980)] y vivir con ambos padres. [47.7% (OR = 1.359)]. Adicionalmente, venir de un estrato socioeconómico 3, 4 o 5; ser hombre; pertenecer a una familia funcional; experimentar un ambiente escolar positivo, y vivir con 4, 5, 6 o más personas en el hogar fueron identificados como factores protectores. **Conclusiones:** Los factores identificados asociados al acoso escolar resaltan una oportunidad para la intervención en enfermería dirigida a promover la salud mental y fomentar el trato respetuosos en los colegios, un campo subexplorado por estos profesionales.

Palabras clave (Fuente DeCS)

Acoso escolar; factores de riesgo; instituciones académicas; salud mental; estudiantes.

Fatores associados ao *bullying* escolar em Cartagena, Colômbia: uma análise do papel da vítima

Resumo

Introdução: O bullying é frequentemente observado no ambiente escolar, afetando diretamente crianças e adolescentes; portanto, é necessário identificar os fatores envolvidos na ocorrência desse fenômeno. **Objetivo:** determinar os fatores de risco associados ao bullying entre estudantes de duas instituições públicas em Cartagena, sob a perspectiva da vítima. **Materiais e método:** Foi realizado estudo transversal com 656 alunos do sexto ao nono ano, com idades entre 10 e 11 anos. Estudantes que estiveram ausentes da escola durante a coleta de dados foram excluídos. Foi realizada amostragem estratificada com distribuição proporcional. Foram utilizados o Questionário para a Exploração do Bullying Escolar, a Escala de Autoestima de Rosenberg, o APGAR Familiar, a Escala de Violência Familiar, a Escala de Clima Escolar e o Questionário de Atitude Autoritária. Além disso, foi realizada uma análise multivariada utilizando o odds ratio (OR). **Resultados:** Os fatores de risco identificados incluem ter uma atitude autoritária [4,7 % (OR = 9,464)], vivenciar violência familiar grave ou moderada [16,2 % e 0,6 %, respectivamente (OR = 3,422)], ter alta autoestima [5,2 % (OR = 1,980)] e morar com ambos os pais [47,7 % (OR = 1,359)]. Ademais, vir de estratos socioeconômicos 3, 4 ou 5, ser homem, pertencer a uma família funcional, vivenciar um ambiente escolar positivo e conviver com 4, 5, 6 ou mais pessoas no domicílio foram identificados como fatores de proteção. **Conclusões:** Os fatores identificados associados ao bullying destacam uma oportunidade de intervenção de enfermagem voltada para promover a saúde mental e incentivar relações respeitadas nas escolas, um campo pouco explorado por esses profissionais.

Palavras-chave (Fonte DeCS)

Bullying escolar; fatores de risco; instituições acadêmicas; saúde mental; estudantes.

Introduction

Bullying, or school harassment, is defined as any repeated physical, psychological, or sexual intimidation or aggression directed at an individual, which causes harm, fear, and/or sadness in the victim. This research focused on the study of the phenomenon from the perspective of the victim (1). Bullying frequently occurs in the school environment and directly affects children and adolescents; one in three children worldwide is reported to be a victim of bullying.

According to *Bullying without Borders*, in 2021, it was reported that in Sub-Saharan Africa the prevalence of school bullying was higher (48.2%) than in North Africa (42.7%), and that it was of 41.1% in the Middle East and 30.2% in South America; whereas in Europe and the Caribbean, the rates were lower, with 25% and 22.8%, respectively (2).

Alsaleem et al., in a study conducted in secondary schools in Saudi Arabia, found that the prevalence of bullying was 64.7%. The most prevalent type of bullying was verbal (41.7%), followed by physical (17%) and social (6%) (3). Similarly, a study conducted in 16 Latin American countries found that the prevalence of bullying ranged between 13% and 63% (4). In Colombia, from October 2020 to March 2021, a total of 8981 cases of bullying were reported, and 22% of the student population admitted to having participated in cases of school abuse (5).

According to the literature, various risk factors associated with bullying directed at victims have been identified, including family, individual, social, and academic. Among the family factors, the type of family, communication between members, family dysfunction, parenting methods, and emotional neglect have been found to be relevant. Individual factors such as sex, culture, age, and personality have also been reported. At the social level, factors such as socio-economic status, environment, and social and cultural media that transmit behaviors adopted by adolescents have been highlighted. Finally, at the academic level, the student's grade and academic performance have been identified as contributing factors (6).

Various studies have supported the factors mentioned above, such as the one conducted by Cassiani et al. where a significant association was found between being a victim and having severe (OR=10.39 IC 95%=2.47-43.74 p=0.001) and mild (OR=4.59 IC 95%= 1.72-12.22 p=0.002) family dysfunction (7). Additionally, it was stated that children who are victims of family violence experience bullying at school. Furthermore, Armas demonstrated that being male increases the likelihood of being bullied by 3.32 times compared to females (OR=3.32; IC95% 2.1-5.3); being in the third year of secondary school has been found to increase the probability by 2.23 (OR= 2.23; IC95% 1.3-3.7), as well as being between 14 y 15 years old ($X^2= 1.007$; p=0.604) (8).

Another study conducted in Peru by Valle R. related disability (RP: 1.42; IC95%: 1.31-1.52) to bullying (9). Páez A., in a study conducted in three institutions in Bucaramanga, Colombia, found that victims of school bullying were more prevalent in sixth (35.9%), seventh (38.8%), and ninth grade (27.9%) ($p = 0.03$) (10). All the factors mentioned above are often a focal point for aggressors to exploit these characteristics, leading to repeated attacks that may have behavioral, mental, and social consequences (10), which may include low self-esteem, deterioration of academic performance, and even reaching the point of preferring not to attend classes for fear of being attacked by the aggressor. Such attacks can be repetitive, causing victims to feel harassed, pursued, and humiliated (11).

At the social level, victims of bullying tend to avoid interactions with their peers due to the fear that others may also aggress against them or ask questions they cannot answer because of possible threats related to their situation. This leads to experiences of isolation, phobias toward the school environment, humiliation, feelings of insecurity, episodes of anxiety, negative self-images, and emotional reactions that may result in suicide attempts (12).

Nursing, as a profession responsible for promoting the mental health of children and adolescents, must recognize the risk factors associated with school bullying from the victim's perspective because bullying is an issue that affects the development of students. This makes it essential to develop programs focused on raising awareness, empathy, and respectful treatment within the educational environment to prevent the consequences bullying has on students.

The Facultad de Enfermería at the Universidad de Cartagena, through the Primary Care Center (CAP, for its initials in Spanish), has developed health promotion, disease prevention, and well-being programs, as well as initiatives for fostering healthy coexistence in various educational institutions within the CAP's area of influence, through the practical training of nursing students. This has allowed the identification of the main issues faced by students in these schools, where one of the most frequently observed problems is mistreatment among students, leading to educational interventions focused on promoting respectful behavior.

However, to continue the work and further impact the well-being of students in schools, it is necessary to understand the risk factors that predispose an adolescent student to become a victim of bullying. This will allow the research findings to contribute to the understanding of the phenomenon in this population and provide input for the design of nursing interventions from this perspective. Therefore, the objective of the research was to determine the risk factors associated with bullying in students from two public educational institutions in the city of Cartagena, from the victim's role.

Method

A cross-sectional analytical study was conducted. The population consisted of 1319 secondary school students (sixth to ninth grade) aged between 10 and 18 years, from two public educational institutions within the area of influence of the CAP at the Facultad de Enfermería of the Universidad de Cartagena. A sample of 600 students was estimated, and stratified proportional sampling was performed.

Inclusion and exclusion criteria: Students enrolled in grades 6 to 9 at the selected educational institutions, aged between 10 and 18 years, were included. Students with school absenteeism during data collection were excluded.

Tools

The Bullying Exploration Questionnaire (CEBÚ, as it is known in Spanish), designed by Estrada and Jaik, consists of three scales that explore bullying from the roles of victim, aggressor, and observer. For the purposes of this research, the questionnaire directed to the victim's role was used. It consists of 24 questions with Likert scale response options. The original version of the questionnaire yielded a Cronbach's alpha of 0.933. For interpretation, the average of the obtained scores was calculated: 1–1.6: low; 1.7–3.3: medium; 3.4–5.0: high (13). The internal consistency of this questionnaire in this study was a Cronbach's alpha of 0.885.

The Rosenberg's Self-Esteem Scale is the most widely used scale for measuring self-esteem in scientific research and has shown good internal consistency in adolescents, with a Cronbach's alpha value of 0.72. It consists of 10 questions, which can yield a minimum score of 10 and a maximum of 40 (14). For this research, the internal consistency of this questionnaire was a Cronbach's alpha of 0.511.

The Family APGAR is a questionnaire used to assess family functionality, consisting of 5 questions with response options: Never (0 points), hardly ever (1 point), often (2 points), almost always (3 points), and always (4 points). The score interpretation is as follows: Normal: 17–20 points; Mild dysfunction: 16–13 points; Moderate dysfunction: 12–10 points; Severe dysfunction: 9 or fewer points. In a study conducted in Santa Marta, Colombia, this scale with similar populations showed good internal consistency, with a Cronbach's alpha of 0.79 (15). For this research, the internal consistency was a Cronbach's alpha of 0.843.

The Family Violence Scale (EVF) measures family violence directed at adolescents aged between 12 and 17 years. It consists of 19 items and 4 dimensions: Physical violence, psychological violence, sexual violence, and neglect. It has shown good internal consistency, with a Cronbach's alpha of 0.77 (16). For this study, the internal consistency was a Cronbach's alpha of 0.766.

The School Climate Scale (PACE-33) contains 33 items, 29 direct and 4 reverse items (9, 13, 19, 31), organized into nine subscales: Physical security, norms, student-teacher relationship, peer relationships, group cohesion, environmental-structural aspects, teacher motivation capacity, teacher expectations, and methodological resources. In the psychometric evaluation of the present study, the internal consistency of this questionnaire was a Cronbach's alpha of 0.931 (17).

The Authoritarian Attitude Questionnaire consists of 11 items, with elements derived from the scale developed by Díaz-Aguado and Martínez, and the Questionnaire on Attitudes Toward Diversity and Violence. It was presented as a Likert scale from 0 to 9, where 0 represents "strongly disagree" and 9 represents "strongly agree." In this study, the internal consistency of this questionnaire was a Cronbach's alpha of 0.577 (18).

Statistical Analysis: First, descriptive statistics were used; absolute and relative frequencies, means, and standard deviations were calculated according to the nature of the variables. Second, bivariate and multivariate models were performed, and logistic regression and the chi-square test were used (19).

Ethical Considerations: This research adhered to the statutes of Resolution 8430 of 1993. All parents and guardians were asked to sign an informed consent form. If a parent or guardian did not authorize their child's participation, the minor was excluded from the study. Additionally, students, under the principle of autonomy, provided their written assent. The research was classified as minimal risk, as the survey administered inquired about psychological and social behaviors experienced by the minors, which may have evoked situations potentially causing emotional discomfort. However, since this study was observational, it did not alter any type of behavior in the minors (20).

Results

A total of 656 students participated, of which 55.9% (367) were female and 44.1% (289) male. The average age was 12.9 years ($SD = 1.5$). Of the participants, 26.7% (175) were in eighth grade, 26.1% (171) in sixth grade, 24.8% (163) in seventh grade, and 22.4% (147) in ninth grade. In terms of socioeconomic status, 37.3% (245) belonged to strata 2, followed by 33.8% (222) in strata 3, and 14.5% (95) in strata 1. Additionally, 52.3% (343) of the students had separated parents, while 47.7% (313) had parents living together. Other sociodemographic aspects are described in Table 1.

Regarding students' grades, 50% (328) of the students maintained an average grade between 4.0 and 5.0, followed by 46.3% (304) with an average between 3.0 and 3.9, 2.4% (16) between 2.0 and 2.9, and 1.2% (8) between 1.0 and 1.9.

Table 1. Sociodemographic Characterization of the Students of Two Educational Institutions of the City of Cartagena

Sociodemographic Questionnaire				
Number of people they live with	Frequency	Percentage	Valid Percentage	Cumulative Percentage
1 person	19	2.9	2.9	2.9
2 people	56	8.5	8.5	11.4
3 people	126	19.2	19.2	30.6
4 people	163	24.8	24.8	55.5
5 people	119	18.1	18.1	73.6
6 or more people	173	26.4	26.4	
Total	656	100	100	100
People living with	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Only the mother	63	9.6	9.6	9.6
Only the father	19	2.9	2.9	12.5
Both Parents (mother and father)	39	5.9	5.9	18.4
Father and siblings	307	46.8	46.8	65.2
Mother and siblings	108	16.5	16.5	81.7
Parents and siblings	23	3.5	3.5	85.2
Others	97	14.8	14.8	
Total	656	100	100	100
Parents' religion	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Christians	260	39.6	39.6	39.6
Catholics	232	35.4	35.4	75
Jehovah's Witnesses	21	3.2	3.2	78.2
Other	25	3.8	3.8	82
None	118	18	18	
Total	656	100	100	100
Your parents live together	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Live together	313	47.7	47.7	47.7
Separated	343	52.3	52.3	52.3
Total	656	100	100	100

Source: Prepared by the authors.

Prevalence of School Bullying in the Participants

It was identified that the prevalence of school bullying was low in the majority of participants, with 54.6% (358), followed by medium with 44.4% (291), and high with 1.1% (7). However, the analysis indicates that verbal bullying was frequently present, consisting of criticism (11.3% [74]) and being reported (13.6% [89]). Regarding physical bullying, 13.4% (88) of the students reported being pushed, while 8.7% (57) had been hit with an object, 18.4% (121) frequently had something hidden, 15.2% (100) had something stolen, and 9.3% (61) had their belongings damaged. In relation to psychological bullying, 10.7% (70) were called by nicknames, and 5.3% (35) were mocked when participating in class. Finally, in social bullying, 2.7% (18) were forbidden from joining group activities, and 2.1% (14) were excluded from groups.

Factors for School Bullying in the Participants

Self-esteem: Of the 656 students surveyed, 82.8% (543) were identified with low self-esteem, 12% (79) with moderate self-esteem, and 5.2% (34) with high self-esteem.

Authoritarian attitude: 95.3% (625) were found not to have an authoritarian attitude, while 4.7% (31) presented an authoritarian attitude.

Family violence: 83.2% (546) were exposed to mild family violence, 16.2% (106) to moderate family violence, and 0.6% (4) to severe family violence.

Family functionality: 44.5% (292) were classified as having normal family functionality, 25.6% (168) with mild dysfunction, 16.6% (109) with severe dysfunction, and 13.3% (87) with moderate dysfunction.

School climate: 80.2% (526) reported perceiving a positive school climate, while 19.8% (130) perceived it as negative.

Bivariate analysis showed a significant association between school bullying and factors such as authoritarian attitudes, family violence, family functioning, and school climate. Authoritarian attitudes showed the greatest magnitude of association (OR = 12.2), followed by family violence (OR = 4.01). In contrast, belonging to a functional family and a positive school climate were identified as protective factors (Table 2).

BULLYNG						
SEX	NO	%	YES	%	Chi Square Prob.	OR (I.C. 95%)
Female	188	51.2	179	48.8	0.052	0.73 (0.53 – 1.03)
Male	170	58.8	119	41.2		
BULLYNG						
GRADE	NO	%	YES	%	Chi Square Prob.	OR (I.C. 95%)
Sixth or seventh	176	52.7	158	47.3	0.325	0.8 (0.6-1.1)
Eighth or ninth	182	56.5	140	43.5		
BULLYNG						
AVERAGE	NO	%	YES	%	Chi Square Prob.	OR (I.C. 95%)
Below 3	11	45.8	13	54.2	0.381	0.6 (0.3-1.5)
Above 3	347	54.9	285	45.1		
BULLYNG						
SOCIOECONOMIC STRATUM	NO	%	YES	%	Chi Square Prob.	OR (I.C. 95%)
Stratum 1 and 2	304	54.1	258	45.9	0.545	0.8 (0.5-1.3)
Stratum 3 onwards	54	57.4	40	42.6		
BULLYNG						
NUMBER OF PEOPLE WITH WHOM THE INDIVIDUAL LIVES	NO	%	YES	%	Chi Square Prob	OR (I.C. 95%)
Live with less than 4 people	122	60.7	79	39.3	0.036	1.43 (1.02-2.08)
Live with 4 or more people	236	51.9	219	48.1		
BULLYNG						
LIVIG WITH BOTH PARENTS	NO	%	YES	%	Chi Square Prob	OR (I.C. 95%)
NO	187	54.5	156	45.5	0.977	0.99 (0.73-1.35)
YES	171	54.6	142	45.4		
BULLYNG						
SELF-ESTEEM	NO	%	YES	%	Chi Square Prob	OR (I.C. 95%)
Low	325	59.9	218	40.1	0.000	1.43 (1.02-2.00)
High	33	29.2	80	70.8		

BULLYNG						
AUTHORITATIVE ATTITUDE	NO	%	YES	%	Chi Square Prob	OR (I.C. 95%)
With attitude	355	56.8	270	43.2	0.000	12.2 (3.6-40.7)
Without attitude	3	9.7	28	90.3		
BULLYNG						
FAMILY VIOLENCE	NO	%	YES	%	Chi Square Prob	OR (I.C. 95%)
Not severe or moderate	328	60.1	218	39.9	0.000	4,01 (2.55-6.31)
Severe or moderate	30	27.3	80	72.7		
BULLYNG						
FAMILY FUNCTIONALITY	NO	%	YES	%	Chi Square Prob	OR (I.C. 95%)
Belong to a dysfunctional family	173	47.5	191	52.5	0.000	0.5 (0.3-0.7)
Belong to a functional family	185	63.4	107	36.6		
SCHOOL CLIMATE	NO	%	YES	%	Chi Square Prob	OR (I.C. 95%)
Negative school climate	55	42.3	75	57.7	0.002	0.5 (0.3-0.7)
Positive school climate	303	57.6	223	42.4		

Source: Prepared by the authors.

Subsequently, when a multivariate logistic regression model was performed, the factors that remained associated with school bullying included having an authoritarian attitude, with a frequency of 4.7% (OR = 9.464; 95% CI 2.781-32.207), followed by experiencing moderate or severe family violence with frequencies of 16.2% and 0.6%, respectively (OR = 3.422; 95% CI 2.116-5.535). The third factor was having high self-esteem with a frequency of 5.2% (OR = 1.980; 95% CI 1.171-3.348), and lastly, the risk factor of living with both parents was identified in 47.7% (OR = 1.359; 95% CI 1.126-1.640) (Table 3).

Additionally, it was found that being from socioeconomic strata 3, 4, or 5; being an eighth- or ninth-grade student; being male; belonging to a functional family; having an academic average between 3 and 5; perceiving a positive school climate; and living with 4, 5, or 6 or more people in the household were protective factors (Table 3).

Variables	OR	I.C. 95% for OR	
		Lower	Superior
Being male	0.772	0.551	1.080
Being in eighth or ninth grade of secondary school	0.807	0.576	1.131
Having a grade point average above 3	0.716	0.299	1.712
Belonging to socioeconomic strata 3 or higher	0.830	0.513	1.343
Living with 4 or more people	1.516	1.053	2.181
Living with both parents	1.359	1.126	1.640
Having high self-esteem	1.980	1.171	3.348
Having an authoritarian attitude	9.464	2.781	32.207
Experiencing moderate or severe family violence	3.422	2.116	5.535
Belonging to a functional family	0.738	0.520	1.048
Perceiving a positive school climate	0.701	0.458	1.094

Source: Prepared by the authors.

Discussion

In the present study, the identified risk factors for school bullying in the victim role were having an authoritarian attitude, experiencing moderate or severe family violence, having high self-esteem, and living with both parents. An authoritarian attitude was found to be a significant risk factor for the phenomenon of school bullying, as students with this trait tend to impose their will on others, creating unbalanced power dynamics that foster an environment conducive to abuse and violence (21).

These findings are consistent with the study conducted by Sánchez M. in Peru, where it was considered that the more aggressive or authoritarian the students' attitudes were, the higher the likelihood of victimization—especially when such behaviors were normalized by peers (OR = 1.250) (22).

Exposure to moderate or severe family violence was also found to be associated with an increased risk of becoming a victim of bullying. De Lara et al. (23) considered that family dynamics play a fundamental role in the development of children and adolescents, and when violence is experienced, it can have profound effects on emotional and social well-being (OR = 2.62), as cohabitation is often based on fear and pressure. This environment hinders the ability to establish healthy relationships with peers at school, as witnessing violence between parents can lead to the internalization of aggressive or submissive behavior patterns and an to the inability to defend oneself when facing bullying situations at school (24).

Regarding self-esteem, Castro E. et al. reported that low self-esteem is associated with an unfavorable school climate in response to adverse situations occurring in educational settings (OR = 2.71) (25). Self-esteem has been related to bullying in two ways: as a risk factor for victimization and as a consequence of being bullied. Being a victim can cause a decline in self-esteem due to the aggression experienced from peers (26).

Sánchez M. argued that when high self-esteem is present, the likelihood of being a victim is lower, as such individuals tend to be more self-confident and have better relationships with friends ($t = 3.210$) (22). This contrasts with the findings of the present study, where a significant association was found between having high self-esteem and being a victim of bullying (OR = 1.980). This result is novel, as most studies report low self-esteem as a factor associated with bullying victimization (22). Students with high self-esteem may be more outstanding or perform better academically, which may make them easier targets for aggressors (26).

Living with both parents has been considered a controversial factor, as some authors associate it with protection, while others identify it as a risk factor for becoming a victim of bullying. Rodríguez A. (27) argued that, since the family is the setting where the foundations for personality development are built, having both parents living together is a protective factor. The quality of the parental relationship and the family climate may provide a supportive environment that helps adolescents develop coping skills and self-esteem, potentially reducing the risk of bullying victimization. However, it may also become a risk factor if there is family violence, ongoing conflict, a perceived lack of emotional support at home, or if parents are not involved in the child's school life (28, 29).

The results of this study revealed that belonging to socioeconomic strata 3, 4, and 5; being in eighth or ninth grade; having academic grades between 3 and 5; being male; belonging to a functional family; living with four or more people; and perceiving a positive school climate were identified as protective factors for the victim role.

Socioeconomic status has been considered to influence the social balance and behaviors acquired by individuals. Joyos G. (30) stated that violence levels tend to be higher in lower socioeconomic strata, thus increasing the risk of bullying. Regarding school grade, Armas M., contrary to the findings of this study, reported that being in the third year of secondary school (eighth grade) posed a higher risk of bullying victimization 2.23% (OR = 2.23), compared to other grades, and also noted that males were more likely to suffer from bullying than females (OR = 3.32), as they statistically tend to become involved in conflicts more easily (8).

A positive school climate serves as a protective factor against bullying by promoting healthy peer relationships that lead to respect, tolerance, and acceptance of diversity, as evidenced by the results of this study. Students who adapt well to the school environment are less likely to engage in bullying behaviors, feeling more included and valued (31).

Finally, it is emphasized that this study contributes to the scientific community by providing an analysis of the various factors associated with the victim of bullying. A novel finding is highlighted, which is that high self-esteem constitutes a risk factor for bullying. This finding can contribute to the design of effective interventions based on a risk approach that reduces the prevalence of this phenomenon and promotes healthy school environments for the physical and mental health of students. Furthermore, it contributes to the understanding of the problem within the specific context of Cartagena, where a review of the literature revealed only one study concerning this phenomenon.

In the field of nursing, this study highlights the fundamental role of nursing in schools for the promotion and maintenance of mental health through interventions that educate students on respect for others, emotional management, and peer relationships. It also emphasizes early detection and mitigation of the consequences of bullying in students, allowing the development of activities or pathways aimed at improving school relationships.

However, this research also presented limitations inherent to cross-sectional observational designs that use self-reported questionnaires, such as the inability to establish causal relationships due to the inability to separate exposure from the outcome. Additionally, students may not be completely honest when answering the instrument's questions, introducing biases in data collection.

Conclusions

The risk factors associated with bullying for the victim role were living with both parents, having high self-esteem, having an authoritarian attitude, and experiencing severe or moderate domestic violence. These findings align with studies by other researchers who also mentioned some of these risk factors. It is worth noting that it was unexpected for high self-esteem to be considered a risk factor for this study population, as this finding has not been reported in the published literature. The most frequent types of bullying were verbal bullying, followed by physical bullying, which manifested as criticism, pushing, hitting, and damage and theft of belongings.

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