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ORIGINAL ARTICLE

Prevalence and impact of bullying in a portuguese school: insights from a descriptive cross-sectional study

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Abstract

Introduction and Objectives: Bullying is defined as peer violence, characterized by repeated aggression over time, the intention to cause suffering to others and an imbalance of power between the two sides. The authors set out to quantify the prevalence of bullying and characterize students' engagement and perception of bullying incidents. **Methods:** Descriptive cross-sectional study, in the form of a survey for students at a local school. A total of 199 children were surveyed, of which 55% were male and the median age was 11. **Results:** Regarding experiences of bullying, 60.3% (n = 120) responded positively, with 41% (n = 81) reporting incidents in the last six months. Approximately 8% reported being attacked in the previous week. **Discussion:** Most of the bullying episodes happened among children from the same class (23.6%), and the most common place of occurrence was the playground. Around 46.5% perceived school as a dangerous place. Regarding gender, bullying was more frequent in males (p = 0.013).

Keywords: Bullying. Social medicine. Pediatrics.

Prevalência e impacto do bullying numa escola portuguesa: perceções de um estudo descritivo transversal

Resumo

Introdução e Objetivos: O bullying é definido como violência entre pares, caracterizada pela repetição de agressões ao longo do tempo, intenção de causar sofrimento ao outro e desequilíbrio de poder entre as duas partes. Os autores avaliaram a prevalência de *bullying* em crianças de uma escola local, bem como a sua perceção do mesmo e o papel adotado **Métodos:** Estudo transversal descritivo, consistindo na aplicação de um questionário. Houve um total de 199 inquiridos. 55% eram do sexo masculino, a mediana foi de 11 anos. **Resultados:** Em relação a episódios de *bullying* sofridos, 60,3% (n = 120) responderam afirmativamente, 41% (n = 81) relataram ter tido episódios nos últimos 6 meses, e 8% na semana anterior. **Discussão:** A maioria dos episódios foi entre crianças da mesma turma (23,6%), ocorrendo mais frequentemente no recreio. Aproximadamente 46,5% classificaram a escola como perigosa. Os casos de *bullying* foram mais frequentes em rapazes (p = 0,013).

Palavras-chave: Bullying. Medicina social. Pediatria.

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Keypoints

What is known
- Bullying involves a pattern of aggression that occurs repeatedly over time.
- Bullying can occur not only in schools, but at home or online.

What is added
- 60% of children suffer from bullying.
- Acts of bullying are related to school performance.
- Around 5% of the surveyed children needed professional psychological help to overcome bullying.

Introduction

Bullying is defined as peer violence, characterized by repeated aggression over time, the intention to cause suffering to others and an imbalance of power between the two sides[1].

It has a negative impact on victims' health and psychosocial development[2].

This power imbalance may stem from physical strength, social status within the group or group size. Power may also be achieved by knowing a person's vulnerabilities[3], and using them to humiliate.

Bullying encompasses not only physical aggression, but also verbal attacks (e.g. name-calling or threats), social aggression (e.g. social exclusion or spreading rumors) or, more recently, attacks through the internet and social media (also referred to as cyberbullying)[3].

Large-scale studies conducted in Western nations suggest that 4–9% of young people frequently engage in bullying behaviors, with 9–25% of school-age children being bullied. Some children may also be both bullies and victims, simultaneously[4].

As bullying is an important issue, the authors sought to evaluate its prevalence and characterize its impact in a local school setting.

The aim of this article was to quantify the prevalence of bullying in our region and to examine students' roles, engagement and perception of bullying incidents.

Materials and methods

Descriptive cross-sectional study, consisting of carrying out a survey through the administration of an anonymous standardized questionnaire, modified from the Costa, P. and Pereira, B. (2010) version[5]. The survey was distributed to students in the 5th and 6th grades at an elementary school in the Guarda region. Children were selected according to their school year (5th or 6th), as the authors believed children in this age range would have a heightened awareness of bullying episodes and aggressive behaviors.

Parents authorized students' participation through written consent. The questionnaire was completed by students in their ordinary classroom settings. Only questionnaires which were completed, with no missing responses, were considered valid for analysis.

The questionnaire comprised three sections: the first section addressed matters from the victim's perspective, the second section from the aggressor's perspective and the final section explored children's perceptions of bullying incidents.

Data analysis was conducted using SPSS® Statistics version 29 for descriptive and statistical analysis.

The authors defined victims as anyone who reported suffering any type of violence from their classmates and aggressors as students who admitted engaging in these same acts.

Acts of violence encompassed various behaviors, including physical attacks (such as beating and kicking), verbal offenses and offensive gestures, threats among students (with or without the use of weapons) and damage or theft of school material; defamation, either to other classmates or through the internet; and exclusion.

Categorical variables were evaluated through absolute frequencies and continual variables were evaluated as an average (min, max and standard deviation). A chi-squared test was used to analyze categorical variables. Statistical significance was considered when $p < 0.05$.

Results

A total of 199 children participated in our questionnaire after parental consent. Of these, 55% were males, the average age was 11.18 and the median age was 11, with a min of 10 and a max of 13. Eleven questionnaires were excluded due to incorrect or incomplete filling in.

About 7% of the children had failed one or more years, and 19.6% (n = 37) of the children were reported to have some kind of poor behavior, such as receiving notes on the school record, facing disciplinary sanctions or experiencing suspensions.

In terms of the questions asked about suffering bullying episodes, 60.3% (n = 120) answered affirmatively, with 41% (n = 81) of the children reporting episodes in the past six months, and of these, 8% mentioned attacks the previous week.

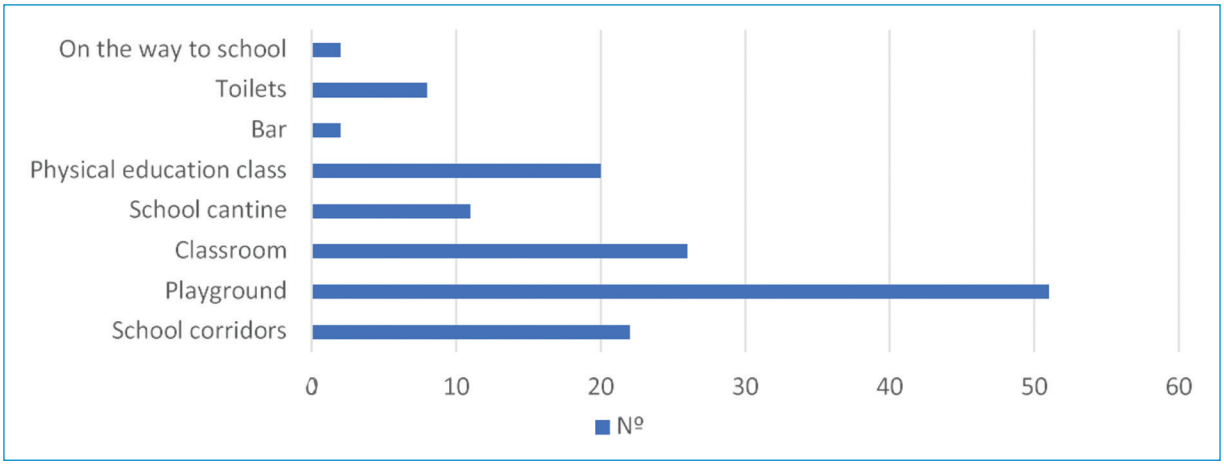

Figure 1. Bullying, place of occurrence.

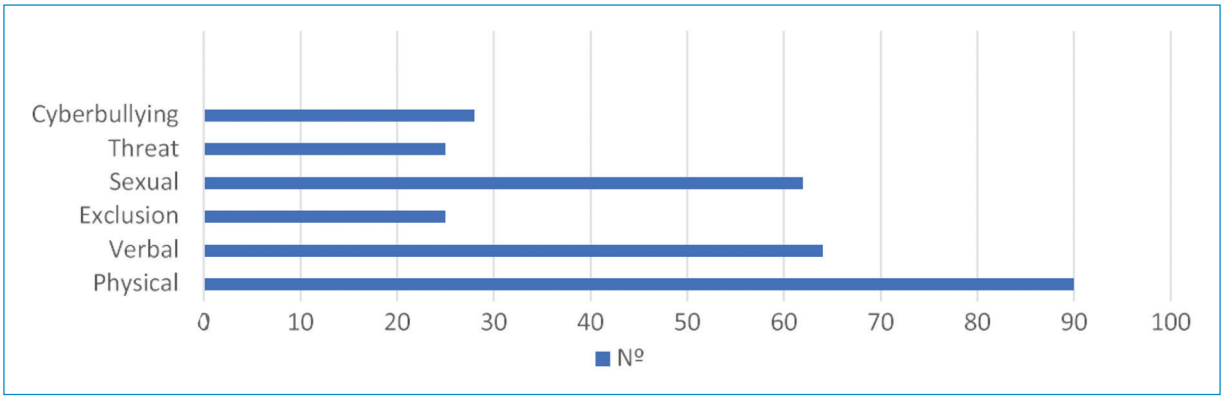

Figure 2. Forms of bullying perceived worst by students.

Most of the bullying episodes occurred among children within the same class (23.6%), while 17.1% reported aggressors from a different class.

The primary location for these incidents was the playground, followed by classrooms (Fig. 1).

The most serious form of bullying identified by children was physical aggression, reported 90 times, followed by verbal aggression, reported 64 times. Sexual aggression was mentioned 62 times (Fig. 2). It is worth pointing out that students were allowed to select multiple forms of aggression.

When asked who they reached out to in these situations, 52% mentioned their parents or a responsible adult at school, 21% preferred to keep it to themselves, and 13% told their teachers. No children went to talk to the school psychologist.

When asked about the dominant feeling after an episode of bullying, the predominant answer was sadness and humiliation (n = 28) followed by shame (n = 15).

About 5.5% of the children reported seeking psychological or medical support to face these types of situations.

When asked from the aggressor's perspective, 26.6% (n = 53) of children admitted to committing acts of violence in the past six months. Of these, 68.5% did so more than once, with 14% occurring in the last week. Most (72.5%, n = 37) claimed they acted in self-defense.

When asked about violent behavior towards a school employee, only 6% (n = 12) answered affirmatively.

Finally, regarding the children's perception of acts of bullying, the worst-considered form of bullying was physical, mentioned 90 times, followed by verbal, mentioned

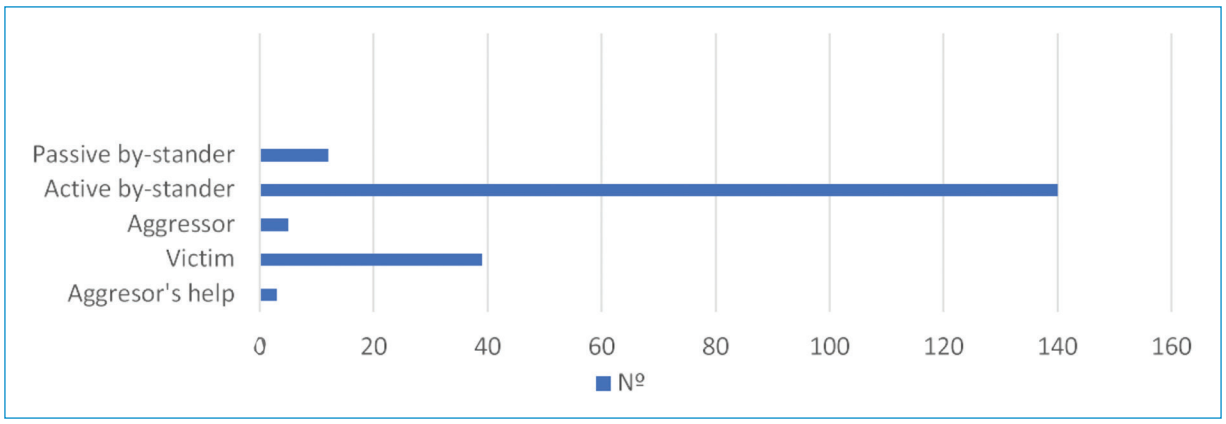

Figure 3. Role adopted during bullying episodes.

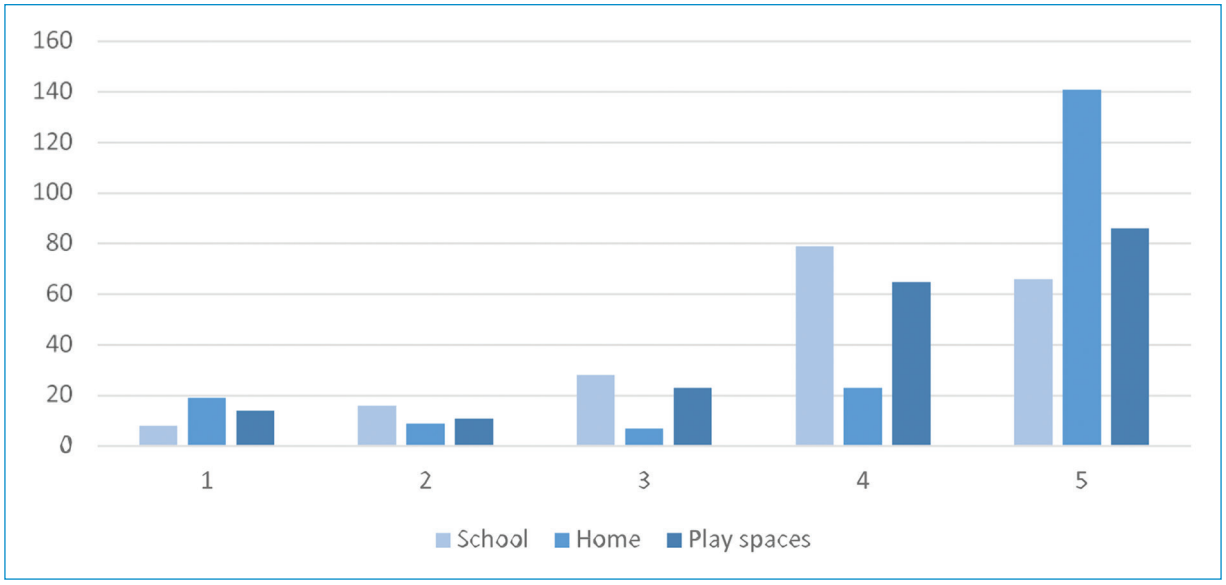

Figure 4. Scores attributed to different environments according to children's affinity for them.

64 times and sexual (considered as performing acts of a sexual nature or any kind of harassment, and insulting others in a sexual manner or making sexual comments), mentioned 62 times (Fig. 2).

The authors also asked about what role most children assumed during episodes of bullying, with about 70% of the children responding that they perceived themselves as active bystanders, i.e. people who tried to end the situation and help the victim (Fig. 3).

Students were also asked to attribute points according to their affinity to different environments (school, home and play spaces), with one defined as "low affinity/total dislike of the space" and five defined as "high affinity/they like the space a lot"; the results are displayed in figure 4. The majority attributed high scores (four or higher) to these spaces.

Students were also asked if they perceived school as a safe place and 46.5% responded negatively.

When analyzing gender, the authors found a statistical significance between children, as males were more frequently bullies ($p = 0.013$ (Table 1)).

Another interesting point was that suffering from bullying did not seem to be related to students' school performance, as children who failed one or more years did not show a significant relation to being victims ($p = 0.377$).

On the contrary, children who failed one or more years are more frequently bullies ($p = 0.04$ (Table 1)).

Table 1. The association between the occurrence of acts of bullying and the following traits: gender, school performance, behavior and being an aggressor/victim (chi-squared test)

Trait	Category	Bullying acts	No bullying acts	p
Gender	Male	37	73	0.013
	Female	16	73	
Disciplinary reports	Reports	17	22	0.026
	No reports	35	122	
Victim of bullying	Academic failure	10	4	0.377
	No academic failure	110	75	
Bully	Academic failure	7	7	0.04
	No academic failure	46	139	
Bully vs victim	Victim	42	78	0.01
	Not victim	11	68	

The authors also found that school behavior was also related to acts of bullying, as students who had more notes on their disciplinary card, as well as school sanctions (suspensions, detentions, etc.), appeared to engage in more acts of violence in the last six months, when compared to others (p = 0.026 (Table 1)).

Another statistically significant finding was that out of the 53 children who reported experiencing bullying, 42 also admitted to engaging in violent behaviors towards others, being simultaneously both victims and bullies (p = 0.01 (Table 1)).

Discussion

The authors found the collected data relevant, not only due to the high prevalence of bullying situations, especially when compared to other series[5,6], but also because of the notable disparity between the number of individuals identifying themselves as bullies (26.5%) and those identifying as victims (46%), the latter being a lot higher. Other studies show a different tendency, with a higher number of bullies compared to victims[5], or even when victims are more prevalent than bullies, the disparity between the two groups is not as high as this[6].

To explain this difference, it could be suggested that only a few individuals are responsible for the aggressive actions but considering the difference in the number of answers, that explanation does not seem to apply here.

The authors believe that, victimization is more intensely perceived by children than in previous series, hence the larger difference between our results.

This, in our opinion, is related to the fact that bullying episodes are always more traumatizing to the victim than to the aggressor, who tends not to value the episodes of poor behaviors toward others, and this may explain why substantially more people report themselves as victims. Also, children who externalize acts of violence may feel ashamed of their behaviors and therefore may not admit to do it.

There was not, at the time of the study, a high prevalence of cyberbullying, although according to what is described in the literature, this is increasing over time[7].

There was a proven male predominance in performing acts of bullying. This is consistent with existing literature, where there is a slight male predominance in bullying[3].

The relationship between poor school behavior and acts of bullying is obvious to the authors, as bad behavior encompasses bullying itself.

The need for medical or psychological support, although small (5.5%), is already significant to the authors, as no child should be placed in an environment so traumatizing that they require professional help.

Being bullied is associated, in the short term, with severe symptoms of mental health problems and, furthermore, has long-lasting effects that can persist until late adolescence[3].

Also, in our study, the percentage of students who keep these episodes to themselves is worrying, and students should be encouraged to speak out. In the literature, results show that adolescents who are bullied report higher loneliness and greater levels of anxiety and depression than their nonvictimized peers[3].

The person who most children reached out to when these episodes happened was their teacher, although the total number of children reporting bullying episodes is relatively low.

This is in line with what is described in the literature., with students allegedly avoiding reporting incidents as they lack faith in staff members' ability to intervene[8].

The authors believe it would be interesting to have more support from school psychologists, i.e. in the form of training activities with children or educational sessions for parents or teachers, to allow for proper recognition of these episodes and correct conduct by all the parties involved.

Also, the perception of a lack of safety among children is, from our point of view, very high. It is important that children feel safe in school, so they can reach max

development at all levels (physical, mental and emotional) and can build meaningful relationships. Some authors suggest that these feelings of insecurity could negatively predict self-disclosure and lead to posttraumatic stress symptoms[9].

Previous studies have already proven a significant association between physical symptoms and psychological complaints like anxiety and depression[10].

Also, many authors have highlighted the relationship between victimization and developing psychiatric issues related to bullying[10].

Finally, the authors found it curious that 42 children are simultaneously victims and aggressors, showing that the percentage of children who engage in acts of violence, even though they suffer from these same acts, is significant.

The main limitation of this study, the authors point to the fact that the survey was filled out by children, who can be rather inconsistent in their answers and recall of past situations.

The definition of bullying might also not be entirely clear to them, particularly the notion of repeated acts of violence, defining bullying.

Despite these limitations, the authors believe the study is relevant due to the sample size and the fact that it allowed us to reach interesting conclusions on the topic, particularly regarding the significant importance children attribute to bullying episodes and how bullying affects their perception of the school environment. Understanding these patterns may enable us to intervene appropriately during future episodes of violence.

Conclusion

Bullying poses a threat to children's well-being and acts of bullying should be stopped at all costs. The percentage of acts of bullying was surprisingly high, with around 60% of children identifying as victims. Additionally, the percentage of children seeking any kind of psychological support underscores the need to address this issue.

The survey highlighted physical aggression as the worst form of violence.

Raising awareness not only among children but also parents, teachers, school directors and the entire school community is crucial to adequately prevent bullying and promote a peaceful environment in schools. The authors suggest incentivizing well-organized support networks and lectures on the topic to help children perceive schools as safe environments.

While some studies suggest that anti-bullying campaigns have limited effects, there are some strategies that can be effective. According to the literature, the most effective interventions are those that address the student as a whole and act on a social, family, education and individual level[11]. In our local school community, organizing lectures on this topic could prepare children and empower them to handle future bullying situations effectively. Similar initiatives could be implemented in other school regions across the country.

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Author contributions

C.M. Francisco: Conception and design of the study, report, review, or another type of work; Acquisition of data either from patients, research studies, or literature; Drafting the article; Final approval of the version to be published (mandatory for all authors); Agreement to be accountable for the accuracy or integrity of the work (mandatory for all authors). I.S. Silva: Analysis or interpretation of data from patients, research results, or literature search; Drafting the article; Final approval of the version to be published (mandatory for all authors); Agreement to be accountable for the accuracy or integrity of the work (mandatory for all authors). A.M. Rodrigues: Critical review of the manuscript for important intellectual content; Final approval of the version to be published (mandatory for all authors); Agreement to be accountable for the accuracy or integrity of the work (mandatory for all authors). L.M. Torres: Drafting the article; Final approval of the version to be published (mandatory for all authors); Agreement to be accountable for the accuracy or integrity of the work (mandatory for all authors). P. Fernandes: Critical review of the manuscript for important intellectual content; Final approval of the version to be published (mandatory for all authors); Agreement to be accountable for the accuracy or integrity of the work (mandatory for all authors).

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Conflicts of interest

None.

Ethical considerations

Protection of humans and animals. The authors declare that no experiments involving humans or animals were conducted for this research.

Confidentiality, informed consent, and ethical approval. The study does not involve patient personal data nor requires ethical approval. The SAGER guidelines do not apply.

Declaration on the use of artificial intelligence. The authors declare that no generative artificial intelligence was used in the writing of this manuscript.

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