

Social distancing as a protective barrier against bullying actions among schoolchildren during the COVID-19 pandemic

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Abstract.

BACKGROUND: Violence in the work or school environment is becoming a public health problem. Bullying in this scenario is characterized by a set of aggressive, repetitive, intentional behaviors which occur without evident motivation and affects countless young people daily.

OBJECTIVE: This study aimed to verify the incidence of bullying cases of elementary and high school students during the COVID-19 pandemic, describing the reasons for this victimization from an emic view; in addition, to compare associated factors such as nutritional status and body image between victims and non-victims of bullying.

METHOD: This is a non-probabilistic descriptive design involving 115 students regularly enrolled in elementary and high school in public schools in the city of Dourados-MS, Brazil.

RESULTS: The results indicated an incidence of 20.9% of victims, with verbal aggression (swearing, nicknames, gossip) and social exclusion being the most recurrent. A total of 78.2% of the victim students did not suffer bullying during social distancing, and 87.3% felt safer in their homes. The rate of overweight and obesity was similar between victims and non-victims, similar to the body perception result.

CONCLUSIONS: This study indicated that social distancing during the COVID-19 pandemic was a protective barrier in school bullying actions.

Keywords: Bullying, social distancing, COVID-19, pandemic, violence

1. Introduction

The growing prevalence of cases of violence, whether in the workplace or not, has currently become a public health problem because it affects the dignity of the victim [1, 2]. Mobbing and bullying are manifestations of violence characterized by a set of aggressive, repetitive and intentional behaviors which

occurs in a context where there is an inequality in the power/strength relationships between peers, causing serious damage to those involved [3, 4]. A probabilistic study in Brazil indicated that the prevalence of bullying cases increased by 5.4% in 2009, 7.2% in 2012, and reached 7.4% in 2015 [5].

In addition to intensifying the development of depression, anxiety and post-traumatic stress disorders, this type of violence increases the probability of suicide among young people [6]. It is known that suicide is the second leading cause of death in adolescents [7]. Studies have indicated that suicidal ideation

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rates are higher among adolescent bullying victims (11.6–14.7%) compared to those who were not victims (2.7–4.1%) [8].

There are several causes associated with bullying victimization, where the appearance of body image, or overweight/obesity condition appear as strong markers [9–11]. Adolescence is a phase in which these characteristics are more evident, precisely due to the process of building gender identity [12], where in the view of young people what is different from the normal pattern ends up showing a distortion of self-image, making it difficult to accept different body appearances among these young people.

During the COVID-19 pandemic, which emerged in Wuhan, China, there were some measures taken to contain the spread of the virus associated with the absence of treatments to fight the virus or a vaccine for prevention, such as the interruption of in-person activities, closing educational institutions, suspension of some professional activities and remote work, and the education of students was also affected by the consequences of the pandemic.

A need to include distance education was implemented in order to minimize the losses caused in times of social distancing by the suspension of on-site education reaching all levels of the school community. In addition, there was an increase in cases of domestic violence against children and adolescents, older adults and against women in different countries around the world during this time of social isolation [13, 14], while information was also noted in which social distancing due to the pandemic reduced the notification rates of violence against children and adolescents due to underreporting [15]. Therefore, our problem was to raise whether the COVID-19 pandemic was a protective barrier in the occurrence of new cases of bullying victimization among students. Thus, the objective of this study was: (1) to verify the incidence of bullying cases before and during the COVID-19 pandemic, describing the reasons for this victimization from an emic view; and (2) to compare the nutritional status and body image between victims and non-victims of bullying.

2. Method

This is a non-probabilistic descriptive design involving regularly enrolled students from the 7th year of elementary school to the 3rd year of high school in public schools in the city of Dourados, MS, Brazil. Due to the COVID-19 pandemic, it

was not possible to carry out the sample calculation to probabilistically determine a sample of the student population. The authors of this study used convenience selection sampling using the snowball technique through our contact network with teachers who work in basic education using a link to an anonymous questionnaire to be answered. Regarding the inclusion criteria, students were to be regularly enrolled and attending classes during the academic period.

It is estimated that 1,500 students received the anonymous questionnaire link between September, October and November of 2020, with an 8% return rate, totaling 115 students, 24 of which were categorized as bullying victims. The profile which characterizes the participants indicated that 60.3% are high school students, the age of the students ranged from 12 to 18 years old, with an average age of 15.2 years old. Of the total sample, 55.7% were female, 82.5% declared themselves heterosexual, 46.1% belonged to the evangelical religion, 61.7% are children of married parents and 52.2% are of a non-white race.

2.1. Instruments for achieving objective 1

First, two instruments were used in order to verify the students who were bullying victims: (A) The Olweus Bullying Questionnaire (QBO) – victim version, created by Olweus [3], has translation and construct validity ($\alpha=0.85$) [16]. The questionnaire consists of 23 victimization items, and has three categories of responses ranging from: (1) “None”, (2) “Once or twice a month”, (3) “Once or more times a week”; (B) Associated questions created by the authors for confirmation and qualitative exploration of bullying actions experienced in the school environment, as shown in the Appendix.

A limitation to be considered in studies involving a diagnosis of bullying victimization is the interpretation of results. As pointed, “A major limitation is to believe that the instruments will provide an error-free result, or that it faithfully points out students with characteristics of aggressors and victims” [17]. The diagnostic instruments punctuate some key information and indicate vulnerability factors where there are situations of victimization, but they do not necessarily indicate an action of bullying, which must be associated with the occurrence frequency of this fact. Thus, together with the questionnaire, other associated questions were included to help confirm the

victimization action, which differs from isolated acts of violence.

2.2. Instruments for achieving objective 2

Nutritional status was obtained using the Body Mass Index calculation through self-reported body mass and height measurement information, with validity indicated by Marangoni et al. [18], adopting the criteria established by Conde and Monteiro [19] to define the limits of low weight, overweight and obesity in the Brazilian reference population in different age groups.

Next, the body silhouette scale was used [20] to check the satisfaction or dissatisfaction level in the perceived and ideal body image, which represents a continuum between a state of thinness and obesity.

2.3. Ethical aspects

The study followed the guidelines and regulatory standards for research involving human beings listed in resolution number 466/2012 of the National Health Commission and was approved by the Ethics and Research Committee of the Federal University of Grande Dourados under opinion number 1,715,577.

2.4. Data analysis

Data analysis was performed using descriptive statistics using central tendency and dispersion values. After the Shapiro-Wilk test, non-parametric inferential analysis was adopted using the Chi-squared test, and the significance value of 5%.

3. Results

The self-declaration of victimization confirmation to determine the occurrence of bullying and exclude isolated episodes of violent acts was adopted from two instruments: (Olweus questionnaire and associated questions, formulated by the author). As an example, there were situations in which the participant indicated that they had experienced acts of violence in the Olweus questionnaire, but in the associated questions they stated that they had never been bullied at school. Thus, 46 participants with an indication of possible victimization were obtained from the Olweus questionnaire, but 22 participants were excluded when using the associated questions who answered, "Did not experience bullying at school

before the COVID-19 pandemic" in questions 1, 3 and 4, reaching a total of 24 participants with clear self-reports and victimization objectives involving aggressive, intentional attitudes without evident motivation in the aggressor's view and which happened repetitively, as indicated in Tables 1 and 2. Table 1 shows the frequency of responses by gender of bullying victims using the Olweus questionnaire, with an incidence of 20.9% of victimization rate.

Regarding the types of bullying, the data reveal that the questions with the highest frequency of responses were: question 7 "Before the COVID-19 pandemic they called me names" with 73.3% of the females and 33.3% males, stated one or more times a week; question 9 "Before the COVID-19 pandemic they insulted me because of some physical characteristic", with 60% of the females and 44.4% of the males answering that they had been insulted once or more times a week; question 12, "Before the COVID-19 pandemic they laughed and pointed at me", with 53.3% of the females and 11.1% males declaring one or more times a week; question 13, "Before the COVID-19 pandemic they called me nicknames that I didn't like", with 80% of the females and 55.6% of the males mentioned it one or more times a week, noting that 20% of the females claimed one or twice a month, totaling 100% of the participants affected in this issue; question 16 "Before the COVID-19 pandemic I was sexually harassed", only the female gender responded that 53.3% had suffered harassment, once or twice a month; question 17 "Before the COVID-19 pandemic I was not allowed to be part of a peer group" with 40% of the females and 11.1% males declared one or more times a week; lastly, question 21 "Before the COVID-19 pandemic others made or tried to make others not like me", with 66.7% of the females reporting one or more times a week.

It was found that verbal aggressions were among the main types of victimization, such as swearing about some physical characteristic and reports about the family, laughter, nicknames, gossip and social exclusion, with the highest percentage among females. On average, each participant signaled ten times among the 23 questions in the questionnaire, with question 23 "Before the COVID-19 pandemic some peers used the internet or cell phone to attack me" being the most cited type of victimization (23 of the 24 research subjects), and question 22 "Before the COVID-19 pandemic I was forced to attack another colleague" cited as affirmative for only 1 participant.

Table 2 shows the frequency of responses to the associated questions, created by the authors to assist

Table 1
Frequency of responses from bullying victims before the COVID-19 pandemic using the Olweus questionnaire

(n = 24)	Male (n = 9)			Female (n = 15)			p
	1	2	3	1	2	3	
1 – I was punched, kicked or shoved	66.7%	33.3%	–	73.3%	26.7%	–	0.728
2 – They pulled my hair or scratched me	88.9%	11.1%	–	86.7%	13.3%	–	0.873
3 – They threatened me	88.9%	–	11.1%	73.3%	26.7%	–	0.120
4 – I was forced to deliver money or my things	88.9%	11.1%	–	80%	20%	–	0.572
5 – They took my money or my things without consent	77.8%	22.2%	–	66.7%	26.7%	6.7%	0.690
6 – They ruined my things	66.7%	22.2%	11.1%	46.7%	33.3%	20%	0.631
7 – They called me names	11.1%	55.6%	33.3%	6.7%	20%	73.3%	0.149
8 – I was insulted because of my color or race	66.7%	22.2%	11.1%	60%	13.3%	26.7%	0.619
9 – They insulted me because of some physical characteristic	22.2%	33.3%	44.4%	6.7%	33.3%	60%	0.512
10 – I was humiliated because of my sexual orientation or mannerism	77.8%	11.1%	11.1%	93.3%	6.7%	–	0.376
11 – They made fun of me because of my accent	55.6%	33.3%	11.1%	80%	6.7%	13.3%	0.235
12 – They laughed and pointed at me	33.3%	55.6%	11.1%	6.7%	40%	53.3%	0.023*
13 – They called me nicknames that I didn't like	11.1%	33.3%	55.6%	–	20%	80%	0.281
14 – I was cornered or placed against the wall	88.9%	11.1%	–	80%	13.3%	6.7%	0.713
15 – I was persecuted inside or outside the school	88.9%	–	11.1%	66.7%	20%	13.3%	0.334
16 – I was sexually harassed	100%	–	–	46.7%	53.3%	–	0.009*
17 – They didn't let me be part of a group of colleagues	33.3%	55.6%	11.1%	33.3%	26.7%	40%	0.239
18 – They completely ignored me, they gave me "ice" treatment	33.3%	44.4%	22.2%	13.3%	46.7%	40%	0.445
19 – They invented that I took things from colleagues	55.6%	33.3%	11.1%	73.3%	20%	6.7%	0.670
20 – They said mean things about me or my family	33.3%	44.4%	22.2%	13.3%	60%	26.7%	0.503
21 – They made or tried to make others not like me	44.4%	55.6%	–	6.7%	26.7%	66.7%	0.001*
22 – I was forced to attack another colleague	100%	–	–	93.3%	6.7%	–	0.429
23 – They used the internet or cell phone to attack me	77.8%	22.2%	–	53.3%	26.7%	20%	0.304

Category: (1) "Not once", (2) "Once or twice a month", (3) "Once or more times a week".

in obtaining a victimization diagnosis. The results showed a higher frequency of female students regarding bullying victims. The reason given by the victims in their qualitative report was that the aggressor adopts these behaviors to raise their status in the group hierarchy.

Although various negative situations have occurred due to occasional social distancing in everyday life during the COVID-19 pandemic, it was evaluated as positive for students who were bullying victims. In our study when asked "How many times have you been bullied at home during the COVID-19 pandemic?" and "Did you feel safer at home not to be bullied during the COVID-19 pandemic?", it was found that 79.2% did not suffer any type of victimization during the pandemic period, and 87.5% of the victims felt safer in their homes, indicating that the

COVID-19 pandemic was a protective barrier against victimization in the school environment.

Regarding the second objective in comparing the nutritional status and body image between victims and non-victims of bullying, this comparison sought to explore whether there is any physical characteristic that is different between victims and other students which could justify victimization. In Table 3, it was verified that nine students (three boys and six girls) identified as bullying victims fit into the classification of overweight and obesity. However, only three students of this total qualitatively reported retrospective reports of victimization from this bodily condition:

"I suffered a lot of fat phobia and homophobia, I prefer not to give details about it. At my new school, I haven't suffered any bullying so far in the pandemic" (Vitória, 14 years).

Table 2
Comparison between gender and frequency of responses to the associated questions created by the authors to assist in obtaining a victimization diagnosis

1 – How many times were you bullied at school before the COVID-19 pandemic?					
I was not bullied at school before the COVID-19 pandemic	Male (n = 9)		I was not bullied at school before the COVID-19 pandemic	Female (n = 15)	
	1 or 2 times per week	Several times per week		1 or 2 times per week	Several times per week
–	2 (22.2%)	7 (77.7%)	–	1 (6.6%)	14 (93.3%)
2 – Why do you think they did this?					
Male (n = 9)			Female (n = 15)		
• They do it to elevate their status	4 (44.4%)		• They do it to elevate their status	7 (46.6%)	
• I am an object or source of fun	2 (22.2%)		• My appearance	3 (20%)	
• I don't know	1 (11.1%)		• I don't know	2 (13.3%)	
• For being black	1 (11.1%)		• Sou objeto ou motivo de divertimento	1 (6.6%)	
• Physical disability	1 (11.1%)		• My accent	1 (6.6%)	
3 – How many times have you been bullied at home during the COVID-19 pandemic?					
I haven't been bullied at home	Male (n = 9)		I haven't been bullied at home	Female (n = 15)	
	Just 1 or 2 times.	Once a week		Just 1 or 2 times.	Once a week
7 (77.8%)	2 (22.2%)	–	12 (80%)	2 (13.3%)	1 (6.6%)
4 – Have you felt safer at home to not be bullied during the COVID-19 pandemic?					
Male (n = 9)			Female (n = 15)		
Yes	No		Yes	No	
8 (88.9%)	1 (11.1%)		13 (86.6%)	2 (13.3%)	

Table 3
Victimization due to body image satisfaction

Body image Evaluation	Male (n = 51)			Female (n = 64)		
	Victim (n = 9)	Non-victim (n = 42)	p*	Victim (n = 15)	Non-victim (n = 49)	p*
Dissatisfied (reduce body silhouette)	1 (11.1%)	14 (33.3%)	0.93	6 (40.0%)	21 (42.9%)	0.39
Satisfied	4 (44.4%)	10 (23.8%)		5 (33.3%)	9 (18.4%)	
Dissatisfied (increase body silhouette)	4 (44.4%)	18 (42.9%)		4 (26.7%)	19 (38.8%)	

*Chi-squared test.

“They called me fat, ugly, ridiculous” (Ana, 14 years).

The results through the Chi-squared test were not significant when analyzing the satisfaction and perception of body image variables together with its classification in BMI, and there were no significant differences between victims and the other subjects in the sample who were not identified as victims ($p=0.53$) for girls or ($p=0.73$) for boys; in other words, the hypothesis that satisfaction with body image and their BMI classification may present an abnormal characteristic which justifies bullying was found.

Table 3 shows that seven students (one boy and six girls) identified as victims showed dissatisfaction with their body image due to being overweight, demonstrating that females were more dissatisfied with excess body weight. Regarding dissatisfaction with thinness, eight students (four boys and four girls) had the desire to increase their body silhouette.

In addition to being a public health problem, being overweight/obese is seen as a reason for discrimination in a society that worships a slim body and physical appearance; for not meeting the imposed standards, obese individuals become a target of ridicule by their colleagues. The report of one student in particular highlights this violence suffered by obese individuals. Maria, 17 years old, comments:

“Since I was little I have always suffered from bullying for being a child and a fat girl too. So there were always those comments that made me uncomfortable. Over time I thought: people grow and mature, but that’s when I lost my nerve because of the annoying jokes about my way of talking and my body just got worse and I felt ugly, embarrassed and very sad because the nicknames made me look in the mirror and I felt the way they described me “look at the fat girl... who’s going to want her?”, “look at her square ass” “look at her lips” ... This all messes with our physical

and mental structure. I often felt angry, but most of the time I felt ashamed to the point of hiding inside the school lockers or anywhere that no one could find me and make fun of me. Over time, the offensive comments not only came from boys, but also from some girls where they said I needed to stop being fat because I couldn't walk with them. This year, due to the pandemic, I was not bullied".

4. Discussion

This study aimed to analyze the records of bullying victimization occurrences in schoolchildren during the COVID-19 pandemic in the city of Dourados, Brazil. Regarding the nature of aggressions which occurred before the COVID-19 pandemic, there was a higher frequency of those of a verbal nature, especially nicknames, derogatory name-calling and insults due to some physical characteristic. The literature corroborates the results of this study, as verbal bullying was also prevalent; this typology is often seen as "jokes" or "typical behaviors of adolescents" at school, not being identified as aggression, thus naturalizing the act within schools [21–23].

The association between being a bullying victim and the student's gender indicates that girls are more prone to victimization. Studies show a higher prevalence of bullying victimization among male students, which differs from the results of this study; but physical aggression among boys is the most frequent form of bullying, therefore more direct and visible, which can lead to greater propensity, while girls are mostly verbally bullied and excluded, which is an indirect form that hinders the visibility and perception of the phenomenon [5, 10, 21, 24].

Different prevalence can be justified by the use of different methodologies such as study design, age, sampling, instruments, the way used to characterize the bullying phenomenon according to period and frequency, in addition to cultural characteristics. In this study, most participants (both boys and girls) stated that one of the reasons that can lead individuals to engage in bullying is to raise their social status. These findings reinforce the aggressor profile, which is related to popularity and the idea of high status [25]. The high status of aggressors can be a problematic aspect, as students who witness or become involved in bullying situations within the school environment run the risk of normalizing the violence, as being appropriate for coping with conflicts or for gaining popularity among peers [25, 26]. Therefore,

bullies may understand their behavior as advantageous, refusing to change them, causing even more difficulties in combating bullying.

Regarding the COVID-19 pandemic scenario and suffering bullying, students felt safer not going to school. On the other hand, studies have shown the pandemic as a context of vulnerability to violence due to social isolation [13]. The school environment as a space for building knowledge and social interactions should be a welcoming, safe and healthy place where children and adolescents can develop fully. However, in many cases, what is observed are individuals who are insecure and afraid to attend due to the violence that permeates the schools. At school attitudes such as mocking, humiliating and intimidating should not be allowed, it should be a space in which individuals learn to have more empathy for others and become more human, values that must go beyond the walls of schools [27].

The results of this study also showed that adolescents of both genders were discriminated against for being overweight (37.5%). Another study corroborates our findings by identifying that adolescents of both genders were at greater risk of suffering discrimination for being overweight or obese compared to those who were at their ideal weight [28]. A similar result highlighted that obese adolescents are more likely to be bullied, and school is the place with the highest occurrence [9].

In the investigation with obese individuals, the feelings of anger and sadness were seen as the most frequent due to being overweight and they became targets of mockery and insulting nicknames [29]. This is similar to what is observed in Maria's report regarding the feelings generated in bullying victims when talking about the feeling of "sadness, anger and shame".

The media dictates the thin body as the standard of beauty, and influences more and more teenagers to seek to fit this stereotype considered perfect. However, these required conditions make obese individuals reject themselves, causing feelings of shame and suffering in relation to their bodies [30]. It was verified from the silhouette scale that most adolescents stated that they were somehow dissatisfied with their physical form according to the distance between the pointed figures. Body dissatisfaction in adolescence is worrisome, as it can lead to adopting inappropriate eating behaviors in a period of development and greater need for nutrient intake, impairing the adolescent's somatic growth, and later on health in adulthood [31].

The 8% return rate of the questionnaires can be a limitation, especially when one wants to statistically explore the analyzed variables. But in this new pandemic scenario it was a problem which not only affected this study, but also different types of sectors globally. Many families' income sources were reduced with the closure of schools and businesses, resulting in an increase in child labor to supplement income or the departure of students from private to public education [32]. The pandemic reduced school enrollments by about 2% in April 2020 [33], and the Current Population Survey (CPS) response rate reduced from 83% in February to 65% in June 2020 [34], indicating that adherence to population participation was a barrier that also limited research.

In this sense, it was possible to notice that there was a reduction in the degree of engagement/involvement of the students, very related to the motivation about the effective participation in the number of work or tasks effectively answered in their curricular subjects [35, 36]. Although this is a fact which has a direct implication on data generalization, in this pandemic moment it is still difficult to say whether the school dropout rate and may have contributed to our low return rate of questionnaires.

The social distancing during the pandemic brought different types of reflections between positive and negative aspects, because when you think that a young person who is afraid to go from their home to school and is terrorized as an object of fun, it is a relief to continue studying at home without suffering. However, how can students with this stigma overcome failure in social relationships and build a successful experience without the school environment? Will they be stuck at home, and only through social networks will they be able to build an identity that strengthens and explores repressed potential as a result of bullying? Although social isolation has been shown to be a protective factor, there have been studies which have indicated many problems related to mental health during the COVID-19 pandemic, such as high depression rates, and anxiety due to loneliness caused by confinement [37].

5. Conclusion

Although the literature currently shows an increase in cases of domestic violence, underreporting is an important criterion to be considered in the prevalence of cases. This cross-sectional study indicated that bullying victims had reduced victimization, in

addition to a feeling of security in their home, indicating that social distancing during the COVID-19 pandemic was a protective barrier in school bullying actions.

Ethical approval

This study was approved by the Ethics and Research Committee of the Federal University of Grande Dourados under opinion number 1,715,577.

Informed consent

Not applicable.

Conflict of interest

None to report.

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Appendix: Related Questions for Diagnosing Bullying Actions

- (1) How many times had you been bullied at school before the COVID-19 pandemic?
 - I was not bullied at school before the COVID-19 pandemic.
 - 1 or 2 times a week.
 - Several times a week.
- (2) Why do you think they did this?
- (3) How many times have you been bullied at home during the COVID-19 pandemic?
 - I was not bullied at home during the COVID-19 pandemic.
 - 1 or 2 times a week.
 - Several times a week.
- (4) Have you felt safer at home to not be bullied during the COVID-19 pandemic?
 - I did not suffer bullying before the pandemic.
 - No
 - Yes