

Bullying in Brazilian school children: analysis of the National Adolescent School-based Health Survey (PeNSE 2012)

Bullying em escolares brasileiros: análise da Pesquisa Nacional de Saúde do Escolar (PeNSE 2012)

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ABSTRACT: *Objective:* To describe the victimization and bullying practice in Brazilian school children, according to data from the National Adolescent School-based Health Survey and to compare the surveys from 2009 and 2012. *Methods:* This is a cross-sectional study with univariate and multivariate analyzes of the following variables: to have been treated badly by colleagues, to have been bullied and to have bullied other children. The following independent variables were analyzed: age, sex, race/color, type of school, maternal education. Prevalence rates were compared between the editions of 2009 and 2012 of the survey. *Results:* Of all the adolescents analyzed, 27.5% have not been treated well by peers at school, with greater frequency among boys (OR = 1.50), at the age of 15 years (OR = 1.29) and 16 (OR = 1.41), public school students (OR = 2.08), black (OR = 1.18) and whose mothers had less education; 7.2% reported having been bullied, with a greater chance in younger students (13 years old), male (OR = 1.26), black (OR = 1.15) and indigenous (OR = 1.16) and whose mothers had less education; 20.8% reported to have bullied other children, with a greater chance for older students, at the age of 14 (OR = 1.08) and 15 years (OR = 1.18), male (OR = 1.87), black (OR = 1.14) and yellow (OR = 1.15), children of mothers with higher education, private school students. There was an increase of bullying in the Brazilian capitals, from 5.4 to 6.8%, between 2009 and 2012. *Discussion:* The occurrence of bullying reveals that the Brazilian school context is also becoming a space of reproduction of violence, in which it is crucial to act intersectorally and to articulate social protection networks, aiming to face this issue.

Keywords: Bullying. Violence. Adolescent. School health. Descriptive epidemiology. Population surveys.

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RESUMO: Objetivo: Descrever a vitimização e a prática de *bullying* em escolares brasileiros, segundo dados da Pesquisa Nacional de Saúde do Escolar (PeNSE), e comparar a evolução entre as pesquisas de 2009 e 2012. **Métodos:** Trata-se de estudo transversal com análises univariadas e multivariadas das variáveis: não ser bem tratado, sofrer *bullying* e praticar *bullying*. Como variáveis independentes, foram analisadas: idade, sexo, raça/cor, tipo de escola, escolaridade materna. Foram comparadas as prevalências entre as edições da PeNSE de 2009 e 2012. **Resultados:** Não foram bem tratados pelos colegas na escola 27,5% dos adolescentes, tendo sido maior a frequência entre meninos (OR = 1,50) mais velhos, 15 anos (OR = 1,29) e 16 anos (OR = 1,41), alunos de escolas públicas (OR = 2,08), de raça/cor preta (OR = 1,18) e cujas mães tinham menor escolaridade. Relatam ter sofrido *bullying* 7,2%, tendo sido a maior chance em alunos mais jovens (13 anos) do sexo masculino (OR = 1,26), da raça/cor preta (OR = 1,15) e indígena (OR = 1,16) e cujas mães apresentaram menor escolaridade. A prática de *bullying* foi relatada por 20,8% e mostrou maior chance em alunos mais velhos, 14 anos (OR = 1,08) e 15 anos (OR = 1,18), do sexo masculino (OR = 1,87), raça/cor preta (OR = 1,14) e amarela (OR = 1,15), filhos de mães com maior escolaridade e alunos de escola privada. Ocorreu aumento de *bullying* nas capitais, passando de 5,4 para 6,8% entre 2009 e 2012. **Discussão:** A ocorrência de *bullying* revela que o contexto escolar brasileiro também tem se tornado um espaço de reprodução da violência, sendo fundamental atuar de forma intersetorial e articulando redes de proteção social, visando seu enfrentamento.

Palavras-chave: Bullying. Violência. Adolescência. Saúde escolar. Epidemiologia descritiva. Inquéritos populacionais.

INTRODUCTION

The World Health Organization defines violence as “the use of physical force or of the real power, or as threats, against oneself, against somebody else, or against a group or a community, which results or can possibly result in lesion, death, psychological damage, deficient development or privacy”¹. Violence is a multicausal phenomenon that is strongly associated with economical and sociocultural inequalities; however, it is also related with subjective and behavioral aspects²⁻⁴.

In Brazil, violence gained major importance due to its magnitude, severity, social impact and ability to make victims and their families vulnerable. Children, adolescents and teenagers are among the most victimized population groups by violence⁵.

There are several types of violence involving children and adolescents in society. Among them, intrafamily violence, school violence and violence in the community stand out⁶. One of the forms of school violence is the aggressive behavior among students, known as bullying. This is a frequent phenomenon involving repeated and intentional acts of oppression,

humiliation, discrimination, tyranny, aggression and domination of people or groups over other people or groups, who are subjugated by the force of the former^{7,8}.

The term bullying comes from the English word bully, which can mean the adjectives “tough guy”, “tyrant”, or the verbs “brutalize”, “tyrannize”, “frighten”. Therefore, it comprehends a subgroup of aggressive behaviors, characterized by its repetitive nature and power imbalance⁹.

Despite being mostly analyzed in the school context, the practice of bullying surrounds several other spaces and age groups. This practice has been identified in three ways:

- 1) Direct and physical – including physical aggression, stealing or ruining objects, extorting money or threatening to do so, forcing sexual behaviors or threatening to do so, imposing the performance of servile tasks;
- 2) Direct and verbal – which involves insulting, putting nicknames, “making fun”, making racist comments or ones concerning any differences on the other person; and
- 3) Indirect – which refers to situations of systematic exclusion of a person from the group, gossiping, spreading rumors, threatening to exclude from the group with the objective of being favored, therefore manipulating the social life of the victim^{7,8}.

Bullying should not be considered as a normal characteristic of the development of children and adolescents, but instead, as a risk indicator for the adoption of more severe violent behaviors, including weapon possession, frequent aggressions and lesions¹⁰. The experience of bullying exposes children and adolescents to the condition of vulnerability¹⁰. Bullying among students is, in general, found in most schools, regardless of the social, cultural and economic characteristics of the students. Studies demonstrate that this is a worldwide problem, which is common for several countries and schools^{2,11,12}.

The exposure to bullying may lead to behavioral and emotional issues, especially stress, decreasing or lost self-esteem, anxiety, depression, poor school performance, and, in more severe cases, even suicide^{13,14}.

Some studies have also analyzed the characteristics of the person who performs bullying. In some situations, the same person who practices bullying can be the victim, therefore inverting the roles¹⁵. Studies including the analysis of the author of the aggression are still scarce in the country. Understanding the forms with which violence presents itself in the school environment is a challenge to face this problem.

In Brazil, the National Adolescent School-based Health Survey (PeNSE), which monitors the health of Brazilian students, included themes about risk and protective factors among adolescents, such as diet, physical activities, intake of substances, violence, and bullying, among others, in its first edition, in 2009⁴. In the second edition, PeNSE 2012 amplified the questionnaire and the sample, in order to represent Brazil and its regions, besides introducing new themes, including ones about the practice of bullying¹⁶.

This study aims at describing the victimization and the practice of bullying among Brazilian students, according to data from PeNSE, and at comparing the evolution between both editions.

METHODS

It is a cross-sectional study that analyzed data from the National Adolescent School-based Health Survey (PeNSE), conducted by IBEG together with the Ministry of Health. Ninth grade students attending public and private schools in Brazil participated in PeNSE, in 2012. Some results were compared with those from PeNSE 2009.

The sample was measured according to the School Census 2011¹⁷, in order to estimate population parameters for Brazil, the five major geographic regions of the country (North, Northeast, Southeast, South and Center-West) and 26 state capitals and the Federal District. Considering 50% prevalence, a maximum error of 0.03 (3%) is considered in absolute values, as well as a 95% confidence interval (95%CI)¹⁶.

Each of the capitals was defined as a geographic stratum. The other cities, which are not capitals, were grouped inside each of the five major regions, thus forming five strata.

In 2012, the sampling size for the study was of $n = 132,123$. Out of this total, 110,873 were present on the day of the study (84%), and the final number of participants was of $n = 109,104$ (83%) students, which corresponded to a general non-response rate of 17%. Sampling weights were used for responding students, in order to represent students enrolled in the 9th grade of elementary school.

According to published data¹⁶, in the sample of students analyzed in 2012, 86% were aged between 13 and 15 years old; 47% were male participants and 52.2% were female participants; 36.8% were white, 13.4% were black, 42.2% were mulattos, 4.1% were yellow and 3.5% were indigenous; 17.2% of the students attended private schools, and 82.8% of them attended public schools. This distribution is similar to the real population of students.

The self-applicable structured questionnaire was inserted in the smartphone and approaches themes such as diet, physical activity, accidents, violence, mental health, sexuality, among others. This was the second edition of PeNSE and, in 2012, new questions were introduced, including about the practice of bullying. More details about the research can be obtained in other publications¹⁶.

In this article, violent situations involving adolescents and the following variables were investigated:

- Not being treated well by the colleagues – In the past 30 days, how often did your school colleagues treat you well and/or were thoughtful to you? Aggregated into: “I was not well treated (not once, rarely)”, and “Yes, I was well treated (sometimes, most of the time, always)”;
- Suffering bullying – In the past 30 days, how often did any of your colleagues bring you down, made fun of you, mock you? Aggregated into: “Yes (almost always, always)” and “No (rarely, sometimes)”;
- Practice bullying – In the past 30 days, did you bring down, mock, intimate or tease any of your school colleagues, so that the person was hurt, annoyed, offended or humiliated? Aggregated into: “Yes” and “No”.

At first, the calculation of the prevalence of these variables and its respective 95%CI was conducted with regard to sex, age, race/color, administrative dependency of the school (public or private) and maternal schooling. Univariate and multivariate analyses were also conducted, that is, the estimated crude and adjusted odds ratio (OR) by age, sex, race/color, administrative dependency of the school and maternal schooling. When OR is superior to 1, it indicates more chances, and inferior to 1, it indicates protection. If the 95%CI does not contain the number 1, then the higher chances or more protection are statistically significant.

The prevalence registered by the variable *suffering bullying* in the editions of PeNSE 2009 and 2012 was compared for the strata of 26 capitals and the federal district. The sample size for the study of the capitals in 2009 was composed of 60,973 students, and, in 2012, of 61,145 students. The prevalence of the variables per each capital and the 95%CI was calculated to verify if there were differences between 2009 and 2012. The collected data were inserted in a data base, being analyzed with the statistical software SPSS (PASW Statistics, version 18).

The study was approved by the Research Ethics Committee of the Ministry of Health, report n. 192/2012, concerning registration n. 16805 of CONEP/MS, on 27/03/2012. Students participated voluntarily. They were aware they were free to not participate, or do not answer part or the whole questionnaire. All of the data of the students, as well as the schools', were kept in secrecy.

RESULTS

Table 1 describes the sample of students according to the following outcomes: not being well treated, suffering bullying and practicing bullying, and according to the following independent variables: sex, age, color/race, administrative dependency of the school and maternal schooling.

Among 9th grade students, in 2012, 27.5% (95%CI 26 – 29) reported that they have never, or hardly ever, been treated well by the school colleagues, especially among boys, 31.7% (95%CI 29.4 – 34.1); 30.1% (95%CI 28.9 – 31.4), in students attending public schools, *versus* 14.8% (95%CI 13.6 – 16.1) in students attending private schools; black race/color, 31.9% (95%CI 29.8 – 31.4) and whose mothers have no schooling, 39.8% (95%CI 36.9 – 42.9) and other mothers with lower schooling. Suffering bullying (always or almost always feeling humiliated) by school colleagues was reported by 7.2% (96%CI 6.6 – 7.8) of the students. Percentages were higher among male students, 7.9% (95%CI 7.0 – 9.1) *versus* the female students, 6.5% (95%CI 6.2 – 6.7); and among students whose mothers have no schooling, 8.3% (95%CI 7.2 – 9.4). The practice of bullying has been reported by 20.8% of the students (95%CI 19.5 – 22.2), being more frequent among male participants, 26.1% (95%CI 24.5 – 27.9), in relation to female participants, 16.0% (95%CI 15.1 – 16.9); and among children whose mothers have higher schooling (Table 1).

The adjusted OR of not being well treated by school colleagues is higher among older students, aged 15 (OR = 1.29) and 16 years old (OR = 1.41); male students (OR = 1.5); black race/color (OR = 1.18), and coming from public schools (OR = 2.08). Higher maternal schooling was considered as a protective factor (Table 2).

The adjusted OR shows that the chances of suffering bullying are higher among students aged more than 13 years old. Age is a protective factor against suffering bullying: 16 years old and more (OR = 0.73); 15 years old (OR = 0.76); 14 years old (OR = 0.88). The chance of suffering bullying increases among male students (OR = 1.26); mulattos (OR = 1.15) and

Table 1. Prevalence, with a 95% confidence interval, of having been treated badly, having been bullied and having bullied other children in Brazilian 9th graders, according to age, gender, ethnicity/race and maternal education. Brazil, 2012.

	Not being well treated		Being bullied		Practicing bullying	
	%	95%CI	%	95%CI	%	95%CI
Total	27.5	26 – 29	7.2	6.6 – 7.8	20.8	19.5 – 22.2
Age (years)						
<13	26.9	20.5 – 34.4	8.8	6.6 – 11.8	17.7	12.9 – 23.7
13	23.5	19.9 – 27.6	7.9	7.6 – 8.3	19.4	18.3 – 20.5
14	25.1	23.7 – 26.5	7.1	6.5 – 7.9	21.1	19.9 – 22.4
15	32.2	28.6 – 36.0	6.7	5.6 – 7.9	22.4	19.2 – 25.9
16 and more	35.9	33.9 – 38.1	6.5	6.1 – 7.0	20.4	18.3 – 22.7
Gender						
Male	31.7	29.4 – 34.1	7.9	7.0 – 9.1	26.1	24.5 – 27.9
Female	23.6	23.1 – 24.2	6.5	6.2 – 6.7	16.0	15.1 – 16.9
Color/race						
White	25.2	23.5 – 27.0	7.3	6.3 – 8.4	21.0	19.5 – 22.5
Mulatto	27.8	26.2 – 29.5	6.6	6.1 – 7.1	19.7	18.1 – 21.4
Black	31.9	29.8 – 34.1	8.1	7.2 – 9.1	23.2	22.2 – 24.2
Yellow	28.8	27.1 – 30.5	8.3	6.9 – 9.9	22.6	20.4 – 25.0
Indigenous	29.1	25.9 – 32.5	7.9	7.3 – 8.5	22.1	20.4 – 23.9
School						
Public	30.1	28.9 – 31.4	7.1	6.2 – 8.0	20.3	18.6 – 22.1
Private	14.8	13.6 – 16.1	7.6	6.9 – 8.3	23.6	22.8 – 24.4
Maternal schooling						
None	39.8	36.9 – 42.9	8.3	7.2 – 9.4	17.7	15.8 – 19.8
Incomplete elementary school	29.4	27.0 – 32.0	6.5	5.6 – 7.5	19.3	17.7 – 21.0
Complete elementary school	28.2	26.5 – 29.8	6.9	5.3 – 9.1	20.9	18.6 – 23.4
Incomplete high school	26.1	22.7 – 29.8	7.2	6.1 – 8.6	22.5	21.1 – 24.0
Complete high school	21.7	20.5 – 22.9	7.2	6.5 – 8.1	21.4	20.4 – 22.5
Incomplete higher education	21.5	20.3 – 22.6	7.3	6.3 – 8.4	24.4	23.4 – 25.3
Complete higher education	17.6	16.4 – 18.9	7.1	6.5 – 7.7	23.5	21.9 – 25.2

Table 2. Crude and adjusted odds ratio of having been treated badly, having been bullied and having bullied other children in Brazilian 9th graders, according to age, sex, ethnicity/race and maternal education. Brazil, 2012.

	Not being well treated		Not being well treated		Being bullied		Being bullied		Practicing bullying		Practicing bullying	
	Crude OR	95%CI	Adjusted OR*	95%CI	Crude OR	95%CI	Adjusted OR*	95%CI	Crude OR	95%CI	Adjusted OR*	95%CI
	%		%		%		%		%		%	
Age (years)												
<13	1.19	1.00 – 1.42	1.15	0.92 – 1.42	1.12	0.79 – 1.58	1.29	0.98 – 1.68	0.89	0.64 – 1.24	0.96	0.68 – 1.360
13	Ref	ref	ref	ref	ref	ref	ref	ref	ref	ref	ref	ref
14	1.08	0.92 – 1.27	1.02	0.90 – 1.16	0.89	0.80 – 0.98	0.88	0.83 – 0.93	1.11	1.08 – 1.15	1.08	1.03 – 1.130
15	1.54	1.45 – 1.63	1.29	1.22 – 1.36	0.83	0.69 – 0.99	0.76	0.65 – 0.88	1.20	1.05 – 1.36	1.18	1.08 – 1.290
16 and more	1.82	1.59 – 2.09	1.41	1.22 – 1.63	0.80	0.73 – 0.87	0.73	0.61 – 0.87	1.06	0.91 – 1.24	1.03	0.88 – 1.200
Sex												
Male	1.49	1.38 – 1.62	1.50	1.36 – 1.67	1.24	1.10 – 1.41	1.26	1.06 – 1.51	1.86	1.72 – 2.00	1.87	1.67 – 2.10
Female	Ref	ref	ref	ref	ref	ref	ref	ref	ref	ref	ref	ref
Color/race												
White	Ref	ref	ref	ref	ref	ref	ref	ref	ref	ref	ref	ref
Mulatto	1.14	1.10 – 1.17	1.01	0.96 – 1.05	0.90	0.80 – 1.00	0.92	0.81 – 1.05	0.92	0.87 – 0.97	0.99	0.94 – 1.04
Black	1.39	1.33 – 1.45	1.18	1.09 – 1.29	1.12	1.04 – 1.20	1.15	1.00 – 1.33	1.13	1.06 – 1.20	1.14	1.06 – 1.23
Yellow	1.20	1.09 – 1.31	1.15	0.95 – 1.33	1.15	0.83 – 1.59	1.27	0.86 – 1.88	1.10	1.03 – 1.17	1.15	1.07 – 1.23
Indigenous	1.21	1.10 – 1.34	1.14	0.99 – 1.32	1.08	0.89 – 1.31	1.16	1.02 – 1.32	1.06	0.92 – 1.23	1.03	0.93 – 1.14
School												
Public	2.48	2.15 – 2.87	2.08	1.97 – 2.19	0.92	0.73 – 1.16	0.97	0.81 – 1.16	0.82	0.73 – 0.92	0.87	0.78 – 0.97
Private	Ref	ref	ref	ref	ref	ref	ref	ref	ref	ref	ref	ref
Maternal schooling												
None	Ref	ref	ref	ref	ref	ref	ref	ref	ref	ref	ref	ref
Incomplete elementary school	0.63	0.59 – 0.66	0.67	0.63 – 0.72	0.77	0.64 – 0.92	0.75	0.64 – 0.87	1.10	1.05 – 1.16	1.14	1.07 – 1.14
Complete elementary school	0.59	0.54 – 0.64	0.65	0.58 – 0.73	0.82	0.63 – 1.07	0.78	0.61 – 0.99	1.22	1.05 – 1.42	1.19	1.06 – 1.34
Incomplete high school	0.533	0.48 – 0.58	0.61	0.56 – 0.65	0.86	0.69 – 1.07	0.81	0.67 – 0.99	1.34	1.15 – 1.56	1.32	1.18 – 1.47
Complete high school	0.41	0.36 – 0.47	0.50	0.42 – 0.60	0.86	0.70 – 1.05	0.80	0.67 – 0.95	1.26	1.10 – 1.44	1.22	1.11 – 1.33
Incomplete higher education	0.41	0.35 – 0.48	0.55	0.44 – 0.69	0.87	0.72 – 1.04	0.79	0.66 – 0.94	1.49	1.32 – 1.68	1.38	1.27 – 1.50
Complete higher education	0.32	0.26 – 0.39	0.49	0.39 – 0.62	0.84	0.68 – 1.04	0.74	0.62 – 0.90	1.42	1.19 – 1.69	1.30	1.15 – 1.47

*Adjusted for age, sex, race, school (public and private), and maternal education.

indigenous people (OR = 1.16). The school did not show significant differences, and higher maternal schooling proved to be a protective factor (Table 2).

The practice of bullying, after adjustment by age, sex, race/color, administrative dependency of the school and maternal schooling, on the other hand, was more likely to happen among older students, aged 14 years old or more (OR = 1.08) and 15 years old (OR = 1.18); among male students (OR = 1.87); black (OR = 1.14) and yellow race/color (OR = 1.15). Students attending public schools practiced less bullying (OR = 0.87), and higher maternal schooling was associated with the more frequent practice of bullying: incomplete higher education (OR = 1.38), complete higher education (OR = 1.30) and incomplete high school (OR = 1.32) (Table 2).

After analyzing only the set of capitals, the report of suffering bullying increased from 2009 to 2012 among 9th grade students in Brazilian capitals: from 5.4% (95%CI 5.1 – 5.7) to 6.8% (95%CI 6.4 – 7.2). The following capitals presented statistically significant increase

Table 3. Prevalence of having been bullied, with a 95% confidence interval, in Brazilian 9th grade students, according to Brazilian State Capitals and the Federal District. National Adolescent School-based Health Survey, 2009 and 2012.

Capital	2009		2012	
	%	95%CI	%	95%CI
Porto Velho	4.1	3.2 – 5.0	5.1	4.1 – 6.3
Rio Branco	5.8	4.6 – 6.9	8.2	6.3 – 10.4
Manaus	4.8	3.7 – 6.0	5.0	4.0 – 6.2
Boa Vista	6.5	5.3 – 7.7	6.8	5.7 – 7.9
Belém	4.2	3.3 – 5.1	4.7	3.9 – 5.6
Macapá	4.5	3.6 – 5.4	6.4	5.4 – 7.4
Palmas	3.5	2.6 – 4.5	6.6	5.4 – 8.0
São Luis	4.8	3.9 – 5.6	5.3	4.5 – 6.3
Teresina	4.8	3.9 – 5.7	5.0	4.1 – 6.0
Fortaleza	4.8	3.8 – 5.9	6.4	5.4 – 7.6
Natal	4.2	3.3 – 5.1	6.4	5.1 – 7.9
João Pessoa	5.5	4.5 – 6.6	6.2	5.2 – 7.4
Recife	5.7	4.7 – 6.7	6.9	6.0 – 7.9
Maceió	5.3	4.0 – 6.5	5.1	4.2 – 6.1
Aracaju	4.6	3.7 – 5.6	5.6	4.6 – 6.7
Salvador	4.2	3.2 – 5.1	6.9	5.7 – 8.2
Belo Horizonte	6.9	5.9 – 7.9	7.6	6.5 – 8.8
Vitória	5.6	4.5 – 6.6	8.1	6.8 – 9.6
Rio de Janeiro	5.6	4.7 – 6.5	6.2	5.1 – 7.4
São Paulo	5.6	4.7 – 6.6	8.0	6.8 – 9.3
Curitiba	5.7	4.7 – 6.7	7.1	5.8 – 8.6
Florianópolis	4.5	3.6 – 5.4	4.9	4.1 – 5.9
Porto Alegre	4.7	3.6 – 5.8	4.9	3.8 – 6.2
Campo Grande	5.4	4.3 – 6.4	7.2	6.1 – 8.5
Cuiabá	4.4	3.4 – 5.3	6.1	4.8 – 7.8
Goiânia	5.6	4.7 – 6.5	6.9	6.0 – 7.9
Distrito Federal	6.5	5.5 – 7.4	7.0	6.0 – 8.3
Total	5.4	5.1 – 5.7	6.8	6.4 – 7.2

in the period: Vitória, São Paulo, Rio Branco, Salvador, Natal, Macapá, Palmas, Campo Grande, Cuiabá (Table 3).

Not being well treated was more frequent in the North region (30.7%; 95%CI 28.5 – 33.0) and less frequent in the South (25.9%; 95%CI 23.5 – 28.4); suffering bullying was more prevalent in the South region (8.2%; 95%CI 8.0 – 8.4) and less common in the North (5.7%; 95%CI 4.0 – 7.3); the practice of bullying was more common in the Southeast and the South regions, respectively (23.6%; 95%CI 20.9 – 26.4 and 23.2%; 95%CI 21.7 – 24.8), and less frequent in the North and Northeast regions (16.5%; 95%CI 16.0 – 17 and 16.1%; 95%CI 13.5 – 18.6, respectively) (Figure 1).

DISCUSSION

The study points out that about one quarter of the students reported not having been well treated by the colleagues, and this frequency is higher among boys, older and black students of public schools whose mothers had lower schooling. Suffering bullying was prevalent among younger, black and indigenous boys, whose mothers had lower schooling, being more frequent in the South region and less common in the North region. The practice of bullying was reported by one fifth of the students, especially among older, black and yellow race / color boys, sons of mothers with higher schooling, from private schools, being more frequent in the Southeast and South regions, and

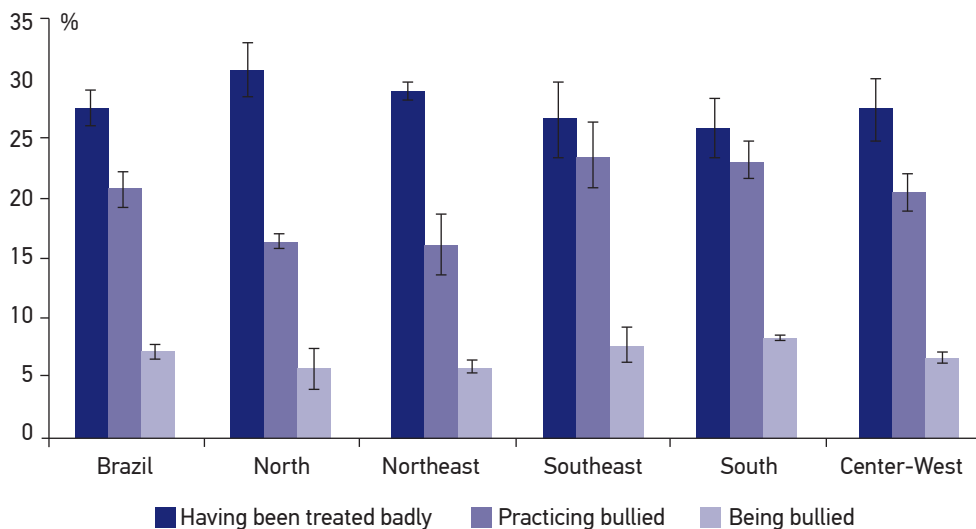


Figure 1. Prevalence, with a 95% confidence interval, of having been treated badly, having been bullied and having bullied other children in Brazilian 9th graders, according to region. Brazil, 2012.

less frequent in the North and the Northeast. There was more bullying in the capitals between 2009 and 2012.

Studies about school violence have been gaining importance for educators, the society and families. School violence refers to a complex phenomenon that has affected the routine, being a daily threat to physical and psychological integrity, as well as to human dignity^{7,18}.

Being an aggressor or a victim of bullying is not a school problem to be minimized. On the contrary, this problem may lead to serious consequences, both for the victims and the aggressors, such as depression, for instance, for victims, and criminality or antisocial behavior for aggressors, even during adulthood¹⁹. Studies prove that children and adolescents who were involved in bullying situations at school in the role of the aggressors were involved in criminality, including violent crimes, in youth and adulthood¹⁹.

The prevalence of bullying ranges according to the country and regions. A study conducted in the United States with 15,503 students, in 158 schools, showed that 20.1% of the students were victims of bullying in school in the 12 months prior to the study, being more common among girls (22%) than boys (18.2%)²⁰. In a study with adolescents in European and other developed countries, the World Health Organization identified bullying in 14% of the 13 year-old adolescents, even though there are great variations between countries¹².

In Brazil, in 2010, a study with a sample of 5,168 students from the fifth to the eighth grades in public and private schools from the five regions of the country characterized bullying with aggression more frequently and identified 12.5% of victims¹⁸.

In national and international studies, it is possible to observe that the event is still prevalent among boys, be it as victims or aggressors and this fact is in accordance with findings in literature^{12,15,21}, as well as in PeNSE 2009². A recent study conducted in Brazil indicated that boys presented more than twice as many chances of being aggressors in relation to girls in situations involving bullying in school²¹. In the United States, a study describes more prevalence among girls²².

The results in this study showed that older students, even from the 9th grade, suffer less bullying, which has also been found in other studies^{18,23}. Older students have other characteristics, and they can be more socially engaged, which would lead them to be more protected from victimization. This still needs to be further investigated¹⁸. The findings in this study corroborate the ones of other authors, indicating higher prevalence of bullying among younger boys, aged between 11 and 14 years old, being less common in elementary and high school. Concerning aggressors, data are not clear, and can even be diverging²⁴. In PeNSE, aggressors were mostly older.

It is worth to mention that PeNSE 2009² did not find significant differences between the schooling of the parents of boys who suffered bullying. In this study, both the ones who reported suffering bullying and those who were not well treated by the colleagues had mothers with lower or no schooling. With regard to students who practiced bullying,

the opposite was observed: their mothers had higher schooling, and this result was found in other studies^{21,23}. That is, higher maternal schooling proved to be a protective factor against suffering bullying, which is confirmed by a study that points out that children coming from family contexts with restricted cultural capital, who are little encouraged and followed-up by their parents in their academic tasks, and whose parents do not talk or share ideas with them, have higher chances at bullying²⁵. It is confirmed, therefore, that the role of parents and family groups should also be valued in investigations and interventions about development, maintenance and prevention of bullying^{26,27}.

Scientific evidence shows that the reduced individual and social vulnerability, including the involvement with school violence, is a result of the implementation of the strategy of Health Promoting Schools in a participative educational context. Interdisciplinary, intersectorial and continuous approaches are more effective. A global approach, in which there is coherence between school policies and practices and the promotion of social inclusion and commitment towards education, facilitates the acquirement of better learning results, increases emotional well-being and reduces risk behaviors²⁸.

These data corroborate with the statement of recent studies, which have indicated ethnical-racial characteristics as a risk marker for specific health conditions²⁹. In the United States, a study identified that African-American students had 46% more chances of being a victim in school in relation to white students²⁰. Among the causes that motivate bullying, it is possible to mention intolerance against black people, Asians and homosexuals in public schools and against those who do not fit the aesthetic pattern of height/weight and consumption in private schools¹.

In this sense, it is important to think about the role and the interference of different socialization contexts, such as family, school and society, in the emergence of aggressive behaviors. Dominant social models in a globalized society based on a neoliberal economy have contributed with the increasing rates of systematic intimidation and school victimization³⁰.

In Brazil, the National Adolescent School-Based Health Survey (PeNSE), conducted in 2009, enabled to measure the occurrence of bullying among adolescents in schools of Brazilian capitals, thus revealing that the Brazilian school context has also been turning into a space of reproduction of violence^{2,4}. PeNSE 2009 indicated that 5.4% of the students reported having suffered bullying, and this prevalence increased in 2012. The study pointed out to differences between prevalence in the capitals between 2009 and 2012. In 2012, Rio Branco, São Paulo and Vitória stood out among the capitals with more chances of suffering bullying. Local studies should be conducted to understand these local differences.

This study presents some limitations, which refer to the impossibility of conducting causal inferences between the analyzed outcome and the inclusion of adolescents who were attending school and those who were present in the classroom at the time the questionnaire was applied. This decision may have led to a biased sample, since

missing school or school evasion may be related to the studied factor. However, this limitation does not nullify the results, since the work was conducted with an expressive sample. Other studies are necessary, especially qualitative analyses, in order to respond to representations, to meanings and senses attributed to bullying by the students and other actors, such as parents and teachers.

Even though some initiatives are expressed as being fragmented and discontinuous, in Brazil there are experiences of public policies and actions that aim at reducing violence and bullying at school, which require an investigative look to assess their pertinence and efficacy. These experiences have happened especially by means of multidisciplinary strategies, the effective participation of different social actors, full care and education in health as instruments of transformation, as well as the empowerment and autonomy of subjects. These programs and instruments have been moving from political federal guidelines, but they also include other actions, which are planned in the scope of each state and in the administrative dynamics and policies of each city^{9,31-33}.

CONCLUSION

The study enabled to identify the occurrence of bullying among adolescents in schools of Brazilian capitals, thus considering observations from other national and international studies. However, the Brazilian school context has also been seen as a space of reproduction of violence.

In this sense, we understand that bullying occurs inside a broad social context, and there are several motivations for it. There are the individual components, that is, the ones related to the group in which students are inserted, and obviously, to families and social and cultural components, which compose the mosaic and the complexities involved in bullying; even though they do not explain it, they give clues about how to intervene in reality efficiently.

In order to stop the (re)production of the bullying cycle in the school context, sociopolitical initiatives in the field should try to answer the challenges to remove this problem from clandestinity. It is important to articulate multiple social sectors and different sectors of society in order to implement public policies that aim at stimulating values and attitudes of peace and healthy relationships.

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