Prevalence of exposure to peer aggression at school and self-perceived bullying victimization among low-income adolescents: The influence of sex

Marlene A. Vieira, Jair J. Mari, Isabel A. Bordin

Departamento de Psiquiatria, Universidade Federal de São Paulo(UNIFESP), Brazil

Introduction - Exposure to peer aggression events at school may vary by gender, but how adolescent boys and girls interpret these events as bullying victimization is not clear.

Objectives - Regarding exposure to peer aggression at school and self-perceived bullying victimization, our study aims to estimate prevalence rates in the past 6 months according to sex. Another aim is to verify the extent to which peer aggression is perceived as bullying by adolescents according to sex.

Methods - This is a cross-sectional study nested in a longitudinal study [1] that investigated a population-based sample of 1,409 6-to-15-year olds at baseline (response rate=87.8%). A 3-stage probabilistic sampling procedure (random selection of census units, eligible households and target child) was used to generate sampling weights. At baseline, trained lay interviewers applied a semi-structured questionnaire to 680 (94.4% of 720) adolescents (11-15-years). This poster analyses baseline data reported by in-school adolescents (n=669).

Exposure to violence at school (peer aggression events) was measured by a 15-item scale previously used in a Norwegian study with schoolchildren [2]. This scale investigated three types of peer aggression events: physical aggression, verbal harassment and social manipulation. Any suffered peer aggression corresponded to at least one event occurring more than once in the past 6 months.

Self-reported bullying victimization was investigated based on the adolescent response to one question: “How often have you been bullied in the past 6 months?” The frequency of more than once a week or most days identified repeated exposure. This question was asked after investigating peer aggression events, and after informing the adolescent about the definition of bullying (“when one or more school peers are repeatedly doing bad things to you such as name-calling, threatening, hitting, spreading rumors about you, excluding you from the group or teasing you to hurt your feelings”).

Results - This manuscript is focused on a representative sample of in-school 11-to-15-year olds (n=669; 51.7% girls). Prevalence of exposure to one or more peer aggression events was higher among boys (28.2%) than among girls (15.9%). Boys suffered more physical aggression (11.8% vs. 5.9%) and more verbal harassment (22.8% vs. 12.8%) than girls. The prevalence of social manipulation was similar among boys (13.1%) and girls (9.7%). Similar rates of boys (5.3%) and girls (5.6%) considered themselves victimized by bullying. Among those who did not consider themselves victims of bullying, boys suffered more peer aggression than girls (25.3% vs. 12.1%).

Exposure to peer aggression events at school interpreted as bullying victimization - Among female adolescents who reported one or more peer aggression events more than once in the last six months, 28.2% (17.6% - 41.9%) considered themselves victims of bullying more than once a week in the last 6 months. Among males who reported one or more peer aggression events more than once in the last six months, 15.1% (8.0% - 26.8%) considered themselves victims of bullying more than once a week in the last 6 months. Therefore, there is a tendency of more girls than boys to interpret the suffered peer aggression as bullying victimization (28.2% vs. 15.1%, $p = 0.07$). Among those who considered themselves victims of bullying, it was observed that boys and girls suffered similar rates of physical aggression, verbal harassment and social manipulation. Among those who did not consider themselves victims of bullying, boys were more exposed to one or more peer aggression events than girls [(25.3% (19.5% - 32.2%) vs. 12.1% (8.1% - 17.8%); $p = 0.001$], suffered more physical aggression than girls [9.4% (5.7% - 15.0%) vs. 3.6% (1.7% - 7.4%); $p = 0.028$] and more verbal harassment than girls [21.2% (15.8% - 27.7%) vs. 9.2% (5.7% - 14.6%); $p = 0.002$]. It can be said that boys endured higher levels of peer aggression events than girls without interpreting them as bullying.

Conclusion - Boys were more exposed to peer aggression than girls, but girls more easily interpreted the suffered aggression as bullying. Therefore, in terms of targeting higher risk students who would benefit from school interventions aimed to reduce bullying, it is important to identify adolescents who suffered an emotional impact of peer aggression events (e.g. feeling hurt or harmed) with special attention dedicated to girls.

Table 1. Prevalence of peer aggression events and self-perceived bullying victimization according to sex

	Boys N=327		Girls N=342	
	N (%)	(CI 95%)	N (%)	(CI 95%)
SCHOOL VIOLENCE/BULLYING				
PEER AGGRESSION EVENTS (occurred more than once in the past six months)				
Any physical aggression	31 (11.8)*	(7.7-17.5)	15 (5.9)	(3.3-10.0)
Any verbal harassment	64 (22.8)*	(17.3-29.3)	47 (12.8)	(8.6-18.8)
Any social manipulation	35 (13.1)	(8.9-18.8)	36 (9.7)	(6.1-15.1)
Any peer aggression event	82 (28.2)**	(22.3-35.0)	59 (15.9)	(11.0-22.5)
SELF-PERCEIVED BULLYING VICTIMIZATION (more than once a week in the past six months)	19 (5,3)	(3,1-9,0)	18 (5,6)	(3,4-9,1)

Absolute numbers of subjects are unweighted (refer to the sample), and prevalence rates are weighted (refer to the city population).

Chi-square tests identify differences by sex: * $p \leq 0.05$, ** $p \leq 0.01$, *** $p \leq 0.001$.

References:

- (1) Bordin IA, Duarte CS, Ribeiro WS, Paula CS, Coutinho ES, Sourander A, et al. Violence and child mental health in Brazil: The Itaboraí Youth Study methods and findings. Int J Methods Psychiatr Res. 2018. <https://doi.org/10.1002/mpr.1605> [cited 2019 May 30]
- (2) Rønning JA, Handgaard BH, Sourander A (2004) Self-perceived peer harassment in a community sample of Norwegian school children. Child Abuse & Neglect, 28(10):1067–1079.

Ethical considerations: The Brazilian National Committee for Ethics in Research (process 25000.182992/2011-76) & UNIFESP's Research Ethics Committee (process 0324/11) approved the study.

Acknowledgements: Collaborative study between Universidade Federal de São Paulo and University of Tromsø (Norway) funded by Conselho de Pesquisa da Noruega (Project 201470/S50)

Marlene Apolinário Vieira received a doctoral scholarship (process 2016/17931-5) from Fundação de Amparo à Pesquisa do Estado de São Paulo (FAPESP).

Correspondence: Marlene Apolinário Vieira – marleneapo@yahoo.com.br