

SCHOOL BULLYING: PREVALENCE AND VARIATION IN AND BETWEEN SCHOOL SYSTEMS IN TIMSS 2015

STEFAN JOHANSSON, DEPARTMENT OF EDUCATION AND SPECIAL EDUCATION, UNIVERSITY OF GOTHENBURG

Johansson, S., Myrberg, E., & Toropova, A. (2022). School bullying: Prevalence and variation in and between school systems in TIMSS 2015. *Studies In Educational Evaluation*, 74, 101178. <https://doi.org/https://doi.org/10.1016/j.stueduc.2022.101178>

Structure of the presentation

1. The concept of bullying
2. Cross-country variation in school bullying
3. School factors and bullying
4. Purpose
5. Data, variables and methods
6. Results
7. Discussion and conclusions
8. Implications for policy and practice

The Concept of Bullying

- Bullying is defined as **intentional, repeated** aggressive behavior involving a **power imbalance** (Olweus, 1993).
- Types of bullying: physical, verbal, relational (social exclusion, rumor spreading), and cyberbullying (Smith, 2014).
- The study emphasizes the social context of bullying
 - adopting Bronfenbrenner's socio-ecological model (Bronfenbrenner, 1979).
 - Factors related to bullying are not only at individual level, but family, school and community levels has an impact



Cross-country Variation in School Bullying

- Bullying prevalence varies significantly across countries and regions (Craig et al., 2009).
- Cultural, socioeconomic, and school system differences contribute to this variation (Gaffney et al., 2019).
- Countries in Europe, North America, and East Asia tend to have lower rates, while Africa and the Middle East have higher rates (UNESCO, 2018).



How is Bullying Prevalence Measured?

- Bullying prevalence is often determined by the frequency of experiencing bullying behavior.
- Different criteria are sometimes applied to indicate 'bullying'
 - One single question to determine bullying before questions about behavior
 - Definitions of bullying are presented to respondents before questions about the behavior
 - Varying cut-offs like monthly or weekly
- International variation in bullying rates is also due to differing operationalizations across countries.

School Factors and Bullying

- School climate and students' sense of belonging strongly influence bullying prevalence (Wang & Degol, 2016).
 - SC: values and norms shared by all working in schools; safe and orderly climate
 - SB: relatedness, membership/attachment to the school
- Socioeconomic status (SES) of schools has mixed effects across countries (e.g., Juan et al., 2018).
- Other factors: achievement heterogeneity, parent-school relationship, and resource availability (Zych et al., 2019).

Purpose of the paper

- Explore the prevalence of school bullying among 4th grade students in 50 countries participating in TIMSS 2015.
- Investigate school-level factors to understand variability in bullying across schools and countries.
- Examine the impact of socioeconomic status, school climate, and school belonging on bullying prevalence.

Data, Variables and Methods

- Data from TIMSS 2015 with 50 participating countries.
- Focused on 4th grade students.
- Multilevel modeling was used to examine within-school and between-school variation in bullying prevalence.
- Covariates include socioeconomic status (SES), school climate, student belonging, and school resources.

Indicators of Bullying Behavior

Bullying Behavior	Never (%)	Weekly (%)
Made fun of me or called me names	49.7	18.9
Left me out of games	54.3	15.4
Spread lies	57.8	13.3
Hit or hurt me	56.8	12.9
Stole something from me	68.2	9.6
Made me do things I didn't want to	71.9	8.5
Shared embarrassing information about me	67.5	9.6
Threatened me	72.7	8.9

Variables potentially influencing bullying rates

- **Achievement heterogeneity.** Standard deviation of the mathematics achievement in each school.
- **Socioeconomic status (SES):** based on home resources (education level, number of books, study resources).
- **School safety and order:** teachers' perception of safety, respect, and student behavior
- **School discipline:** principals' reports on theft, vandalism, absenteeism, fights.
- **Student belonging:** students' feelings of safety, fairness, and attachment to the school.
- **School resources:** availability of teachers, books, and libraries.

Analytical steps

- Investigating the bullying prevalence across all countries using the bullying index variable created by the IEA.
- Identify school-systems with large between school variation by means of a multilevel model
- Investigate whether our school variables could explain variation in school bullying.

Results: Bullying Prevalence in TIMSS 2015 Countries

- Bullying is prevalent and on quite high levels across all countries.
- Weekly bullying: ranges from 4% in Korea to 35% in Bahrain.
- On average, 43% experience bullying monthly, and 15% experience it weekly.
- Countries with large differences in bullying between schools include Bahrain, Indonesia, and South Africa.

Results: Socioeconomic Status (SES) and Bullying

- Socioeconomic status (SES) has varying effects across countries.
- In Japan, higher bullying prevalence was found in high-SES schools.
- In contrast, in South Africa, schools with lower SES reported higher levels of bullying.

Results: Student Belonging and Bullying

- A stronger *sense of belonging* is associated with reduced bullying.
- In the UAE, a 1 standard deviation increase in students' sense of belonging reduced bullying by 0.31 SD.
- Students who feel connected to their peers and teachers are less likely to be involved in bullying.

Results: School Climate and Bullying

- A safe and orderly school climate significantly reduces bullying.
- Schools with better emotional and physical safety reported lower rates of bullying.
- Clear and consistent discipline policies are also linked to lower bullying rates.

Discussion and Conclusions

- Bullying is a widespread issue across schools, with significant variation between countries and schools.
 - The results of this study mirror general trends found in earlier cross-country comparisons
- Socioeconomic status, school climate, and student sense of belonging are critical factors influencing bullying.
- Addressing these factors may reduce bullying prevalence, particularly in countries with high school-level variation.

Discussion and Conclusions, cont.

- The bullying rates were high in this study with well over 50% of the students experiencing bullying at least monthly in many countries
 - may depend on how prevalence is measured
- While response options in this study may be less affected by cultural bias than "agree" options, some differences in response styles may be influencing the cross-country differences

Implications for Policy and Practice

- To reduce bullying, school principals and teachers should focus on improving the school climate and fostering student belongingness.
- Anti-bullying policies or programmes (Kiva, OBPP) could be more widely implemented and tailored to address the specific needs of schools with higher bullying prevalence.
- Future research is needed to explore the mechanisms of how school climate and belonging reduce bullying.



UNIVERSITY OF GOTHENBURG

Thank you!

STEFAN JOHANSSON

Stefan.johansson@gu.se