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At risk: Age, gender, and socio-economic status in bullying victimisation among South African primary school students

Abstract

While there is public and political consensus on the need to safeguard the physical and psychological welfare of students at school, more needs to be known about which South African students are at risk of exposure to specific forms of bullying. Such data is crucial in informing the development of appropriate school safety programmes. Using self-reported nationally representative data from 11 891 Grade 5 students who participated in the 2019 Trends in International Mathematics and Science Study (TIMSS) cycle, this paper first examines the extent and nature of bullying in South African primary schools nationally and by school socio-economic status. It then examines risk factors related to being a victim of certain forms of bullying. The results point to significant age and gender differences, where boys and older students are more likely to be victims of bullying. The paper concludes that policymakers, teachers, and principals must consider these factors when designing interventions to support safe learning environments for students in South African primary schools.

Keywords: school bullying, TIMSS 2019, bullying risk factors, Safe learning environments

1. Introduction

Bullying is repeated harmful behaviour that is aimed at intentionally causing physical and/or psychological harm to a vulnerable individual (Olweus, 2016). Regardless of the form it takes, bullying is characterised by the perpetrator inflicting intense intimidation to develop a pattern of degradation, maltreatment, and fear for their victim (Evangelio *et al.*, 2022; Umoke *et al.*, 2020). Bullying amongst children, which often takes place at school, is problematic as it affects the social skills as well as physical and psychological well-being of victims and perpetrators of these actions immediately and in the long term, with the effects lasting into adulthood (Tippett & Wolke, 2014). For the victims in particular, bullying has a negative impact on their daily lives and well-being, as well as their education,

and can lead to life-long scars and harm adult development (Nunan, 2018; Umoke *et al.*, 2020; Varela *et al.*, 2019). Victims of severe bullying tend to experience adverse psychological effects and are also at a higher risk of causing self-harm and attempting suicide. Perpetrators, some of whom have been bullied themselves (Juan *et al.*, 2018), may continue to display aggressive behaviour and commit domestic violence within their relationships later in life (Tippett & Wolke, 2014).

Findings from the 2019 cycle of the Trends in International Mathematics and Science Study (TIMSS) revealed that 74% of South African Grade 5 students reported being exposed to one or more forms of bullying within schools almost monthly (Mullis *et al.*, 2020). This alarming statistic, coupled with frequent media reports of violent incidents in schools, underscores the pervasive safety issues in South African educational environments. The prevalence of bullying reflects broader concerns about violence in South African society, where schools are often microcosms of the country's high levels of social instability and crime (Zuze *et al.*, 2016). The persistence of bullying in both primary and high schools has led to heightened public concern and a call for more comprehensive interventions (Protogerou & Flisher, 2012; Steyn & Singh, 2018). South African children often experience unsafe and violent situations from a very early age, leading to serious consequences for their immediate physical safety and long-term psychological health. Understanding the socio-economic, cultural, and environmental factors that exacerbate the risk of being bullied is critical in addressing these challenges and developing effective interventions tailored to the South African context.

In South Africa, being a victim of bullying is negatively related to academic achievement because it is associated with barriers to learning (Winnaar *et al.*, 2018; Reddy *et al.*, 2022). In TIMSS 2019, South African Grade 5 students who reported that they were rarely victims of bullying scored higher on achievement assessments than those who experienced bullying more frequently every week, an increase of 90 TIMSS points in mathematics and 124 TIMSS points in science. The identified negative association between bullying and mathematics achievement is suggested to be stronger in the South African context as, internationally, the average difference in mathematics achievement scores between these two groups was 61 points (Mullis *et al.*, 2020). To provide much-needed support, the government has implemented several important policies.

The Department of Basic Education (DBE) published the National School Safety Framework to build safe environments in which students can learn (DBE, 2015). The primary aim of this document is to enable schools to understand, identify, and respond to security threats and monitor progress towards creating conducive learning environments (DBE, 2015). This framework and the accompanying manual draw on other policy frameworks, including the Convention on the Rights of the Child (UN, 1989), the Children's Act (No. 38 of 2005), the Child Justice Act (No. 75 of 2008) and the Regulations for Safety Measures at all Public Schools (DoE, 2001). On August 21, 2023, the DBE unveiled its intentions to introduce legislative amendments that would empower child victims of bullying to independently seek protection orders against their tormentors in terms of Section 2(4) within the Protection from Harassment Act (No. 71 of 2011). This legislation could potentially subject the bullies, including those who are minors, to the prospect of incarceration or participation in correctional service programmes. In order to accomplish the objectives of these guidelines, it is essential for both those creating the policies and those carrying them out to grasp the characteristics and extent of bullying in schools.

The 2019 TIMSS data offer a valuable opportunity to explore the issue of bullying among Grade 5 students to generate policy-relevant insights tailored to the South African context that could influence primary school practices. This paper examines bullying in South African primary schools by addressing key research questions.

1. What is the nature of bullying in South African primary schools?
2. What is the extent of these different forms of bullying in South African primary schools?
3. How do patterns of bullying vary across different socio-economic school contexts?
4. Which student-level factors are associated with experiencing bullying?

2. School bullying as a phenomenon

Bullying is distinct from other forms of aggressive behaviour because of an unequal power dynamic between the perpetrator and the victim of their actions, with the perpetrator possessing greater physical or psychological power or both (Umoke *et al.*, 2020). Research has shown that bullying in schools is a common global phenomenon at all levels of the schooling system. School bullying has, however, been studied extensively in developed countries while there is a growing body of research on this phenomenon in developing contexts such as South Africa. The United Nations Educational, Scientific and Cultural Organization (UNESCO) (2017) produced, for example, the School Violence and Bullying: Global Status Report, which found that the prevalence of bullying appeared to be higher in developing contexts. Despite the body of research, bullying remains pervasive and requires further research. In the following sections, we review the literature concerning the extent, nature, and risk factors of bullying.

3. The scope and characteristics of bullying in South Africa

A growing body of research in South Africa has focused on various forms of bullying in secondary schools at regional/provincial, and national scales (Liang *et al.*, 2007; Pillay, 2021; Townsend *et al.*, 2008). Bullying encompasses both direct and indirect behaviours, which can range from verbal insults to physically aggressive acts or even hate crimes (Wang *et al.*, 2009). Direct bullying includes physical actions, such as hitting, pushing, and kicking, that cause bodily harm, as well as verbal bullying, like name-calling, hurtful teasing, and intimidation. Indirect or relational bullying involves actions such as social marginalisation and circulating rumours about others (Wang *et al.*, 2009; Manuel *et al.*, 2021). The National School Violence Study conducted in South Africa in 2012 found that roughly 13% of students reported that they had experienced bullying, while one in five students had experienced a form of cyberbullying within the previous year (Burton & Leoschut, 2013). This is far lower than the 44% of Grade 5 students who reported some form of bullying in the TIMSS 2015 study (Isdale *et al.*, 2016). More recent studies have concurred with a higher percentage of bullying victims.

Manuel *et al.* (2021) used a nationally representative sample of primary school students from multiple grades to explore bullying among primary school children in South Africa, disaggregated by province. In terms of 'being hit' by other children, the frequency ranged from 23% in the North West Province to 33% in the Free State Province, while Gauteng (34%) and Limpopo (39%) provinces had the highest reports of children being 'left out' or excluded. More than a third of children in all provinces reported being 'called unkind names', ranging from 37% in the North West Province to 48% in the Gauteng Province (Manuel *et al.*, 2021). Direct forms of bullying appear more common than other forms.

Among South African Grade 9 students, Juan *et al.* (2018) found that the two most common bullying behaviours were also direct forms of bullying, namely theft of belongings and being ridiculed. A less frequent form of victimisation was having (mis)information digitally posted about themselves on the internet or via social media applications by others (cyberbullying). Cyberbullying emerged more recently as a means of indirect bullying through electronic communication technology devices such as cell phones, computers, and tablets (Doty *et al.*, 2022; Mehari *et al.*, 2014). Cyberbullying is similar to other forms of bullying, whereby it involves the communication of antagonistic or aggressive messages that aim to inflict harm or distress on others but differs in that the perpetrator can remain anonymous and/or act from a distance (Doty *et al.*, 2022; Tokunaga, 2010).

4. Bullying risk factors

An important area in bullying research is identifying students who are at a higher-than-average risk of becoming victims. Identifying such risk factors further assists inappropriately directing resources and formulating effective interventions to combat bullying. Broadly, student age, grade, gender, socio-economic status, and psychosocial factors have been associated with bullying levels.

4.1 Age and grade

International research indicates that increased age is accompanied by an increased probability of being a bully (Atik & Güneri, 2013), while younger students stand a higher chance of being victims of bullying (Galal *et al.*, 2019; Pečjak & Pirc, 2017). In addition, it was found that the frequency of bullying tends to be higher in the lower grades (Galal *et al.*, 2019; Pečjak & Pirc, 2017). Contrary to international literature, a study by Juan *et al.* (2018) found that older South African Grade 9 students within the same grade were more prone to be victims than younger students.

4.2 Gender

Previous South African studies have reported that boys show a greater likelihood of both perpetrating bullying as well as being victims of bullying (Winnaar *et al.*, 2018; Juan, 2018). The TIMSS 2019 findings showed this gender disparity where there was a higher rate of bullying among Grade 9 boys compared to girls when evaluating across similar schools (Reddy *et al.*, 2022). This difference may, however, be related to the gender gap consistently illustrated in the available literature regarding the prevalence of the nature of bullying, either perpetrated or experienced. Boys are more likely to employ physical which is more overt and thus more visible (Rosen & Nofziger, 2019; Rana *et al.*, 2020). Girls, instead, are frequently involved in covert forms of bullying, such as verbal bullying (Galal *et al.*, 2019; Rosen & Nofziger, 2019). Gendered socialisation plays a key role here as differing guidance is provided to boys and girls, in the home, in broader society, and schools, in terms of their social behaviour and how to express distress. Although boys are generally encouraged to be independent and express power rather than emotion, girls are generally encouraged to be dependent and passive and to freely express their distress (Pejak & Pirc, 2017). Mayeza and Bhana (2021) argue that it is crucial to understand gender power relations among primary school students in South Africa if prevention strategies are to be effective.

4.3 Students' attitudes and beliefs

Psychosocial factors, students' attitudes and beliefs towards their school are associated with levels of bullying in South African schools (Winnaar *et al.*, 2018). For example, Juan *et al.* (2018) showed that students' perception of their school climate was one of the key risk or protective factors regarding bullying among Grade 9 students in South Africa. Schools perceived as having a hostile and penal school climate are associated with higher levels of bullying (Aldridge *et al.*, 2018). In addition, a high sense of school belonging is associated with lower levels of bullying and victimisation (Mandira & Stoltz, 2021). Nunan (2018) emphasised that violence in South African schools hinders the establishment of favourable learning environments and compromises efforts to strengthen students' social relationships and well-being.

4.4 Socio-economic status

The available scholarship suggests an association between socio-economic status (SES) and bullying; however, the complexity of the concept has caused inconsistent findings (Juan *et al.*, 2018). In a longitudinal study, Sourander *et al.* (2000) found no link between socio-economic status (SES) and bullying or victimisation. However, other international research has identified a connection, suggesting that adolescents from lower socio-economic backgrounds—measured by parental education or financial affluence—are at a higher risk of being either bullies or victims (Tippett & Wolke, 2014). In South Africa, Juan *et al.* (2018) found that secondary school students attending no-fee schools were consistently bullied more frequently than those in fee-paying schools. No-fee schools, which serve students from lower SES families, receive higher government subsidies but are generally under-resourced. While victims of physical and relational bullying often have low SES backgrounds, higher SES has been linked to increased rates of cyberbullying and victimisation (Wang, 2009). It has been suggested that the degree of social inequality rather than any one factor predicts bullying (Tippett & Wolke, 2014). This argument is supported by Zuze *et al.* (2016), who noted that within schools, regardless of the school type (public or private), poorer students are at a higher risk of experiencing bullying.

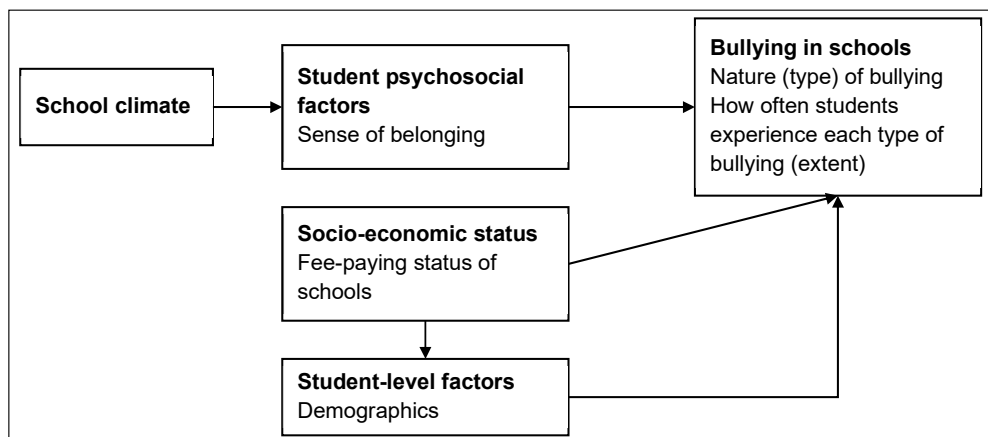


Figure 1: Conceptual model

5. Conceptual framing

Drawing on the literature on the degree, nature and determinants of bullying in South African primary schools, the following conceptual framework illustrates the relationship between these variables (Figure 1).

At the student level, demographic factors, such as age, gender, and socio-economic status, play a substantial role in determining both exposure to and experiences of bullying (Galal *et al.*, 2019; Juan *et al.*, 2018; Reddy *et al.*, 2022). Students from specific demographic backgrounds may be at increased risk of victimisation due to pre-existing social hierarchies. At the same time, the socio-economic context of the school further shapes the overall school climate (Reddy *et al.*, 2022). The nature and extent of bullying—whether physical, verbal, social, or cyber—are shaped by these intersecting factors (Manuel *et al.*, 2021; Wang *et al.*, 2009). This interaction between individual characteristics and broader contextual variables highlights how systemic inequalities may contribute to the perpetuation of bullying behaviours across different socio-economic school contexts.

This conceptual model integrates the Social-Ecological Theory (Bronfenbrenner, 1979), originating from the Global North, with the Southern African philosophy of Ubuntu. Social-ecological theory offers a comprehensive framework for examining the multifaceted and interrelated influences on bullying behaviour. It accounts for factors at the individual (student), relational (peers, families), community (school, neighbourhood) and societal (socio-economic, cultural) levels (Bronfenbrenner, 1979). Ubuntu emphasises collective responsibility, interconnectedness, and community well-being (Ndlovu, 2016; Elonga Mboyo, 2017). Combining these perspectives allows for a nuanced understanding of bullying that acknowledges both individual and communal dynamics.

Regarding bullying, social-ecological theory can be integrated with Ubuntu to emphasise the significance of communal relationships, peer support, and collective harmony within school environments (Bronfenbrenner, 1979; Elonga Mboyo, 2017). From this perspective, bullying is understood as a disruption of communal balance or a breakdown in collective responsibility. Ubuntu's principles highlight the relational nature of bullying and emphasise the value of reconciliation and restorative justice as critical strategies for addressing the issue of bullying, particularly in socioeconomically disadvantaged schools. This approach broadens the understanding of relational dynamics and moves beyond individual-level interventions, advocating for more holistic, community-based solutions (Ndlovu, 2016).

6. Methodology

This article uses South African Grade 5 data from TIMSS 2019, which was conducted by the Human Sciences Research Council in association with the International Association for the Evaluation of Educational Achievement (IEA). The data for South Africa is open source and available on the IEA website (Mullis *et al.*, 2020). The authors of this article formed part of the core research team that conducted the primary data collection and analysis. Ethical clearance was granted by the HSRC Research Ethics Committee (Protocol no. REC 4/16/03/11). The authors utilised OpenAI's ChatGPT as a tool for language editing. The AI model's contributions were limited, and the authors conducted all critical analyses and final revisions.

6.1 Sample

A stratified random sample of 297 schools from the population of South African schools offering Grade 5 at the time of the study took part. The selection of schools was specifically stratified based on province and school type (private or public). A random selection process of intact classes from each sampled school followed this. The 2019 TIMSS study included a total of 11,891 Grade 5 students from South Africa (Reddy *et al.*, 2022). This data is representative at a national level and can be applied to the entire Grade 5 student population in the country.

6.2 Measures and variables

After completing mathematics and science assessments, students completed a contextual questionnaire. The questionnaire asked students to report their gender, age and whether they had certain household items in their homes. A socio-economic status (SES) summary scale was derived based on the availability of nine assets in a student’s home. The fee-paying status of a school (i.e., no-fee or fee-paying) was used as a proxy for school SES. This indicator was derived from the DBEs master list of schools.

The student contextual questionnaire also included items which asked about the frequency of experiencing specific types of bullying. The 11 items were being made fun of (ridiculed), being excluded from games, being the subject of spreading lies, theft of belongings, damaging property, physical injury, coercion (forced to do something), posting photos online, posting information online, being sent hurtful messages online and being threatened. The items were grouped by the general form of bullying: verbal, relational, physical, and cyber. These items were also analysed individually to understand the contrasts between the various aspects of bullying rather than being collapsed into a single scale of bullying.

Student dispositions (psychosocial factors) were examined in the student contextual questionnaire by requesting students to rate their feelings of belonging and fair treatment while at school on a Likert scale. The statements included were: ‘I like being in school’; ‘I feel safe when I am at school’; ‘I feel like I belong at this school’; ‘Teachers at my school are fair to me and I am proud to go to this school’. The IEA combined their responses to these items into a “Sense of School Belonging” scale (Mullis *et al.*, 2020).

Table 1 sets out the independent variables’ range, mean, and standard deviations and constructed indices described above.

Table 1: Descriptive statistics of independent variables

Variables	Continuous variables				Dichotomous variables
	Mean	Standard deviation	Minimum	Maximum	% Students
Age	11.52	0.89	6	15	
Student SES	5.41	2.21	0	9	
Student sense of school belonging	9.98	2.14	3.14	12.75	
Gender (Girls)					50%
School type (No-fee)					70%

Authors’ calculations from the TIMSS 2019 South African Grade 5 dataset

6.3 Data analysis

Data analysis for this paper was done with SPSS v27 and the IEA International Database (IDB) Analyzer (v5.0.13). The latter is a free software plug-in for SPSS developed by the IEA to analyse data from their surveys using a complex sample design. All models estimated in this paper's analysis use this software.

First, descriptive statistics of the student characteristics and the extent and nature of bullying were derived. Second, logistic regression was used to determine risk factors associated with being a bullying victim. The dependent variable, which measures where students were victims of a particular form of bullying at least once a month, was equal to one. Since the linear probability model is heteroskedastic and may predict probability values beyond the (0,1) range, the logistic regression model was used. A logistic regression was run for each type of bullying. Statistically significant measures were identified at the 99% and 95% confidence levels. We hypothesised that lower levels of victimisation would be related to older students, females who felt safe and fairly treated at school and coming from a higher SES background. The odds ratio reveals how much the odds change with a one-unit change in the explanatory variable. If the odds ratio is more significant than one, it means that as the predictor increases, the likelihood of being bullied also increases. Conversely, if the odds ratio is less than one, it indicates that as the predictor increases, the likelihood of being bullied decreases.

7. Findings

Table 2 sets out the percentage of Grade 5 students reporting victimisation monthly by form and type of bullying. Reports of verbal, relational and physical forms of bullying were higher than cyberbullying. At the item level, theft and being ridiculed were the two most commonly reported types of bullying behaviours, which are also direct forms of bullying. Just over half of the Grade 5 students reported something being stolen from them. The least common form of victimisation reported by students was having pictures of themselves posted online by others (cyberbullying). While reports of cyberbullying were relatively lower than other forms of bullying, it is a form that must be monitored as internet access increases in the country. Table 2 also indicates that, on average, across all types of bullying, students in no-fee schools experienced bullying more regularly than students attending fee-paying schools. The most significant difference by school type was observed in being threatened. The differences ranged from 8% (being made fun of and having lies spread) to 16% (being left out of games and having photos posted online).

Table 3 provides the results of analysing student characteristics related to victimisation in terms of specific types of bullying.

Table 2: Percentage of Grade 5 students reporting victimisation monthly by form and type of bullying, nationally and by school type

Form of bullying	Specific type	N*	% Students**	% Students No-fee in schools	% Students in Fee-paying schools
Verbal	Made fun of (direct)	4545	47%	49%	41%
	Threatened me (indirect)	3195	33%	36%	24%
Relational	Spread lies about me (indirect)	3953	41%	44%	36%
	Left out of games (indirect)	3712	38%	44%	28%
	Forced to do something (direct)	3057	32%	35%	22%
Physical	Stole something from me (direct)	4829	51%	54%	41%
	Damaged my property (direct)	3685	38%	41%	29%
	Hit or hurt by others (direct)	3597	37%	40%	30%
Cyber	Posted information about me online (indirect)	2603	27%	29%	16%
	Sent me hurtful messages online (direct)	2595	27%	29%	17%
	Posted photos of me online (indirect)	2329	24%	29%	13%

*Unweighted sample size

**Weighted percentage

Authors' calculations using the TIMSS 2019 South African Grade 5 dataset

Table 3: Odds of being bullied: Results from student inputs

Bullying indicators		Student characteristics				
Form of bullying	Type of bullying	Constant	Age	Gender (ref: female)	Sense of safety and belonging	Socio-economic status
Verbal	Made fun of	0.47	1.14*	0.94*	0.95*	0.80*
	Threatened	0.39**	1.12*	0.78*	0.93*	0.94*
Relational	Excluded from games	0.61	1.12*	0.75*	0.93*	0.92*
	Spread lies	0.62	1.08**	0.92	0.96*	0.95*
	Forced to do something I did not want to	0.51	1.11*	0.77*	0.92*	0.93*
Physical	Stolen property (theft)	0.91	1.05	0.98	1.01	0.90*
	Hit or hurt	0.58	1.09**	0.80*	0.95*	0.93*
	Damaged property	0.68	1.06	0.86*	0.95*	0.96*
Cyber	Sent hurtful messages online	0.15*	1.18*	0.97	0.92*	0.77
	Posted things about me online	0.27**	1.16*	0.77*	0.90*	0.95*
	Posted photos on me online	0.14	1.24*	0.73*	0.89*	0.92*

*p<0.01, **p<0.05

Authors' calculation from the TIMSS 2019 South African Grade 5 dataset

Consistently, older students had a greater likelihood of being bullied than their younger peers through all but two forms of bullying (having property stolen or damaged). The relationship was stronger for cyber and verbal forms of bullying. The findings further indicated that girls were consistently less likely to experience any form of bullying, in particular regarding having pictures posted online or being sent hurtful messages online (cyberbullying). On the other hand, no significant gender gap was identified for the relational (spreading lies or being excluded from games) or physical forms of bullying (theft or being hurt).

Students' dispositions (psychosocial factors) towards the school environment were a weaker, albeit still significant, predictor of the frequency with which they experienced bullying. This significant relationship was found for all types of bullying except for theft, suggesting that students who reported feeling secure and having a sense of belonging while at school had a lower risk of experiencing bullying.

A higher SES slightly lowered the odds of all forms of bullying, except students being sent hurtful messages online. Given what has been found in other studies about the prevalence of bullying in high-poverty schools, it is noteworthy that the association between student SES and bullying was not more powerful and more consistent.

8. Discussion and conclusion

Understanding that bullying is relational (the philosophy of Ubuntu) and occurs within interacting systems (Social-Ecological Theory), this paper aimed to explore the degree and nature of bullying and the risk factors among South African Grade 5 students. The broader goal was to provide findings which could support the strengthening of national anti-bullying agendas and interventions implemented within schools. Before discussing the findings, we first acknowledge the study's limitations.

Cross-sectional data provides a snapshot of information at a single time point, so we cannot establish the directionality of the relationships. Furthermore, self-reported data may be subject to biases such as social desirability or recall bias, which can affect the accuracy and reliability of the responses provided by participants. Despite these limitations, this paper extends the current body of literature in important ways. Our analysis utilised a large-scale and nationally representative sample of South African Grade 5 students. Therefore, the findings of this study extend those from other, smaller South African investigations conducted by Pillay (2021), Townsend *et al.* (2008) and Liang *et al.* (2007). In addition, our analysis provides a comparison to studies that have used South African TIMSS data at the Grade 9 level (Juan *et al.*, 2018; Winnaar *et al.*, 2018).

The descriptive analysis provided insight into the degree of bullying in primary schools, a key indicator of the severity of the phenomenon. The frequency of victimisation at least monthly ranged from 24% (having photos posted online) to 51% (theft), showing that a majority of Grade 5 students were victims of some form of bullying. This points to the pervasiveness of bullying behaviours in South African primary schools. This situation is concerning as children are being exposed to bullying from a young age, which can have long-term effects on their well-being and social and academic development. The descriptive analysis also showed the extent of the different forms of bullying actions across differently resourced schooling contexts. Disaggregating the data by no-fee and fee-paying schools is important in South African education, where resource inequality is prevalent. A clear distinction was illustrated in the average levels of victimisation between the two types of schools.

To examine the nature of bullying, we used four broad forms: physical, verbal, relational and cyberbullying. In addition, the TIMSS items were categorised as direct or indirect. The results from the descriptive analysis and the logistic regression model suggest that these are distinct in nature as the frequencies with which students reported victimisation and the relationship with risk factors varied. This suggests that interventions must be sensitive to various forms of bullying and be targeted based on the types of bullying encountered. While student reports of verbal, relational and physical forms of bullying were higher than incidents of cyberbullying, the latter form cannot be ignored. From a policy perspective, the findings related to cyberbullying may be cause for concern. Due to the nature of cyberbullying, which can occur anonymously, can reach a broad audience and can be difficult to remove from the public domain, it can have devastating and long-lasting effects on victims. As cyberbullying is a relatively newer form of bullying, more in-depth studies focusing on the nature, frequency, and consequences thereof in primary schools are needed. These studies should examine how the digital divide and access to technology influence cyberbullying patterns across socio-economic contexts.

The TIMSS data allowed for generalisable insights into the relationship between bullying experiences and certain risk factors (age, gender, student SES and psychosocial factors) across the country. Interestingly, the study findings related to age do not fit within the international literature, where the latter has found that younger students are at a higher risk of being victims of bullying (Atik & Güneri, 2013; Galal *et al.*, 2019; Pečjak & Pirc, 2017). However, this finding was in line with that of Juan *et al.* (2018), who found that older students within the same grade were more likely to be bullying victims than their younger peers, possibly due to over-aged students being ridiculed for repeating grades or not fitting in with other students. Nonetheless, this requires further study. Qualitative studies could help explain the social dynamics around age disparities within classrooms and how these may contribute to bullying behaviours.

Consistently, girls were found to be less likely to experience bullying across the different forms of bullying that were considered, even indirect bullying, such as social exclusion or spreading rumours. This is noteworthy, as bullying among girls has previously been noted to take the form of indirect or verbal bullying (Galal *et al.*, 2019; Rosen & Nofziger, 2019). The higher prevalence of bullying amongst boy children indicates that developed interventions must be designed as sensitive to the unique risks and needs of this population group.

The relationship between student SES background and bullying, although present, was not as strong as expected based on the reviewed literature, implying that bullying is prevalent within the South African education system as a whole. It could also indicate more homogenous students, in terms of SES, attending the same schools. Further research using supplemental wealth indicators specific to the context, beyond the list of asset variables used in the TIMSS questionnaire, would help elucidate this relationship.

Student attitudes and beliefs about their school environment were weakly associated with bullying behaviour. This aligns with the previous findings regarding Grade 9 South African students of Winnaar *et al.* (2018) and Juan *et al.* (2018). Students who are victims of bullying may often feel like they do not belong or fit in at school and have trouble socialising with peers. As stated previously, the cross-sectional design of TIMSS does not allow us to conclude causality; nevertheless, the association's existence indicates that these psychosocial factors should still be considered in identifying students at risk of being bullied. School management teams need to make a conscious effort to create a school climate where students feel welcome and ensure that safety and discipline policies are enforced.

In the long term, policymakers, teachers, and principals should consider the issues raised in this paper in promoting safe learning environments for students in South African primary schools. Failure to do so may perpetuate cycles of bullying in the education system. An essential aspect to consider in addressing the issue of bullying is the interplay between student-level factors, relational influences, community contexts, including the school, and broader societal factors. Equally important is the integration of the concept of Ubuntu within the education system through increased emphasis on the values of collective responsibility, interconnectedness and community well-being.

Bullying is a global issue, and understanding its prevalence and forms in different regions provides valuable insights into familiar patterns and diverse manifestations. The high rates of bullying in South African primary schools mirror trends observed worldwide, making these findings applicable to broader international discussions on school safety and child well-being. The study highlights the need for context-sensitive interventions, a point that resonates globally. International policymakers can draw lessons from South Africa to develop anti-bullying policies responsive to specific cultural, socio-economic, and educational realities rather than adopting one-size-fits-all solutions.

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