

Composite Effects of Bullying on Grade 10 Learners' Academic Achievements in Buffalo City Metropolitan Municipality, Eastern Cape Province, South Africa

Sadiat A. Olabode^{1*} Sive Makeleni² Ntombozuko Duku³ 

AFFILIATIONS

^{1,2,3}Faculty of Education, University of Fort Hare, East London, South Africa.

CORRESPONDENCE

Email: 201509341@ufh.ac.za

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Abstract: This study examines the composite effect of bullying on the academic achievement of Grade 10 learners in the Buffalo City Metro (BCM), South Africa. Bronfenbrenner's ecological systems theory guided the study. A quantitative research method was employed; schools were selected through simple random sampling, and participants were chosen using proportional stratified sampling. When planning this study, 14,819 Grade 10 learners were confirmed at the BCM Education District, of which 1,037 were included. A structured questionnaire, along with a list of Grade 10 term report marks, was used as part of the analysis. Both descriptive and inferential analyses were performed. The analysis of the study findings reveals that learners who have “Never” experienced forms of bullying are 0.748 times less likely to fail academically compared to those who “Always” experienced bullying. However, since the p-value for this result is 0.315 (greater than 0.05), the impact is not significant. This study concludes that a small proportion of learners had experienced intimidation, spreading of rumours, verbal degradation, physical assault, property destruction, exclusion, and insults. It is recommended that learners be encouraged to speak out about bullying incidents. Parents and guardians are encouraged to monitor their children's behaviour, including their use of technology and phone conversations, and to maintain regular communication with class teachers to track their children's academic progress. If learners continue to study in an adverse environment where violence flourishes, such an environment could create fear, anxiety, and psychological trauma in their minds, which may subsequently affect their academic achievement.

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Keywords: Bullying, school violence, academic achievement, grade 10 learner.

1. Introduction

The frequent incidents of bullying involving learners from schools are a transnational concern. This problem threatens the safety of learners and adversely affects their academic and socio-emotional well-being. According to the United Nations Educational, Scientific, and Cultural Organisation (2019), one in three learners aged 13 to 15 experiences bullying and other forms of school violence for over 13 hours a day, primarily perpetrated by classmates and others at school (UNESCO, 2019). About 1.5 million American school-age teens aged between 12 and 18 were reported to have experienced harassment on school days (Robinson, Vasanthakumari, Balbir, Hashem, Tribhuwan, & Ramesh, 2022). Bullied victims not only perform poorly in school subjects but also exhibit characteristics such as fear of speaking out, low self-esteem, and depression due to ongoing bullying at school (Makafane, 2019, as cited in Okeke et al., 2024, p. 53). Olusegun (2017) found that repeated exposure to bullying often leads learners to avoid attending school, resulting in poor academic performance. Another study by Mosia (2015) revealed that 73.3% of learners in Lesotho schools reported being verbally bullied through name-calling, jokes, gossip, insults, teasing, or threats. A substantial survey conducted by Reddy et al. (2016), reviewing the findings of the Trends in International Mathematics and Science Study (2015) on the mathematics and science achievement of Grade 9 learners, revealed that levels of bullying among Grade 9 learners are alarmingly high. Boys face a disadvantage due to high levels of bullying and grade repetition (TIMSS, 2015, as cited in

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Reddy et al., 2016, p. 14). Additionally, the competitive nature often encouraged among boys can exacerbate conflicts, making them more susceptible to bullying, which can lead to poor academic performance.

An incident occurred at Mondeor High School in Johannesburg, where a 19-year-old Grade 11 learner was stabbed to death on his way to school by three younger learners from a rival school (Etheridge & Ngqkamba, 2019). Many young learners carry dangerous weapons, claiming they do so to protect themselves from older students who bully them or force them to keep drugs (Harber & Mncube, 2017). Another incident in BCM in the Eastern Cape Province involved bullying, which was treated as a "boys-will-be-boys" issue at a secondary school. According to a local newspaper report, a 15-year-old boy with a bloody mouth and shirt surfaced on social media after allegedly being beaten by other senior boys on the school playground (Zondo, 2022). When the victims reported the incident to the school authorities, the case was treated as a typical boys' issue. The Department of Education took further precautionary measures, and the school later suspended the bullies.

The revised studies focused solely on different provinces and geographic areas. None include Grade 10 learners in BCM, which means studies on the effects of bullying are scarce for this specific group of learners within the Buffalo City Metro region. To fill the knowledge and literature gaps, this study examines the composite effects of bullying violence on the academic achievement of Grade 10 learners within the BCM education district in the Eastern Cape Province, South Africa. The research adopts a quantitative research approach.

1.1 Problem statement

Over 246 million boys and girls are exposed to various forms of violence annually (Greene et al., 2018). Stats SA (2023) reports that 70.8% of primary education children and 29.2% of secondary education children have experienced violence at school. Moreover, over a million children (1,073,913) across South Africa encountered some form of violence at school in 2019 (StatsSA, 2023). This situation has undermined the ability to provide a safe learning environment where effective teaching and learning should occur. "The former Minister of Basic Education, Angie Motshekga, confirmed that the spate of stabbings and attacks at schools across South Africa is a major cause for concern" (Khumalo, 2012, p. 2). Poor learner performance is attributed to the high level of indiscipline among school learners (Stanley, 2014). In the Eastern Cape province, a newspaper article reports on an incident of school violence where a high school learner in Buffalo City Metro was bullied by older students on the playground, resulting in severe injuries to his face (Zondo, 2022). Given the scarcity of studies in this region regarding Grade 10, this study examines the composite effects of bullying violence on Grade 10 learners' academic achievement in BCM District secondary schools.

Based on this, *this study aimed to examine the effect of bullying violence on grade 10 learners' academic achievement in BCMM district high schools in the Eastern Cape Province* and answered the research question: *What are the composite effects of bullying violence on Grade 10 learners' academic achievement in BCMM secondary schools?* This null hypothesis is generated to test the appropriate correlation and statistical techniques at a 0.05 level of significance: *There is no significant effect of bullying on Grade 10 learners and their academic achievement.*

2. Theoretical Framework: Ecological Systems Theory

This study is grounded in the ecological systems theory developed by Urie Bronfenbrenner in 1979. Bronfenbrenner (1979), cited in Analisah and Indartono (2018, p. 239), defined ecology in human development as the scientific study of the dynamic and reciprocal relationships between a growing individual and the evolving characteristics of their immediate environment. Bronfenbrenner's ecological systems theory is suitable for explaining the effects of bullying and violence on learners and academic achievement in schools, as it allows the researcher to link the broader context of a child's development, categorising their immediate and extended environments into five

interconnected systems which are the microsystem, mesosystem, exosystem, macrosystem, and chronosystem.

Bronfenbrenner's ecosystems emphasise that behaviour is influenced by multiple layers of context, including family background, school, religious groups, peer pressure, and the community environment (Ward, van der Merwe & Dawes, 2012). Bronfenbrenner (1979), cited in El Zaatari & Maalouf (2022), emphasised the critical role of positive relationships in mitigating the potential harm caused by hostile and non-conducive environments. The authors argue that even the most supportive environments may fail to promote emotionally positive development without nurturing and caring relationships. Furthermore, when learners feel loved and accepted and experience a sense of belonging at home, school, or among peers, they are more motivated to engage in their studies and achieve strong academic outcomes (El Zaatari & Maalouf, 2022). The microsystem, mesosystem, exosystem, macrosystem, and chronosystem are interconnected in a child's development (El Zaatari & Maalouf, 2022; Hatshwayo, 2018).

Microsystem: This level encompasses the immediate environments that directly affect the learner, including interactions with peers and teachers (Bronfenbrenner, 1979, cited in El Zaatari & Maalouf, 2022, p. 5; McWhirter et al., 2017). Bullying can occur in this sphere, and its influence on learners' self-esteem, mental health, and motivation can subsequently impact their academic performance. The mesosystem level connects the various microsystems within the ecological system and focuses on how learners interact with their microsystems. For example, a child's relationships with their family, school, peers, and religious community play a significant role. Additionally, the learner's living environment and exposure to community violence can profoundly affect their development. Bronfenbrenner identified various risk factors within the individual, family, school, peer group, and community, with the microsystem's web of relationships playing a significant role (Bronfenbrenner, 1979, as cited in Ward, van der Merwe & Dawes, 2012, p. 53).

Exosystem: This level encompasses external factors that indirectly influence a student's experiences, such as parental workplace policies or community resources (Hatshwayo, 2018). These factors can contribute to the causes of bullying and the availability of support systems for affected students. For example, if parents lose their jobs or have low incomes, they may project their frustration onto their children, adversely affecting their motivation to succeed academically. Public policy is another exosystemic factor that influences schools and the rules they must follow. In South Africa, education is a fundamental right (SASA, 1996, in Joubert et al., 2015, p. 29). However, students may sometimes exploit these rights, even when engaging in misconduct. McWhirter et al. (2017) believe that public policy decisions concerning educational standards, teachers' salaries, and access to healthcare significantly influence individuals' everyday lives, particularly regarding their families, communities, media, and schools.

The macrosystem, at this level, encompasses broader cultural and societal influences, including societal attitudes toward bullying and education. It shapes school policies and community norms regarding acceptable behaviour and academic expectations (Buckley & Budzyna, 2023). This system represents the most significant cultural and social environment influencing a child, incorporating the historical, cultural, and social factors that affect the behaviours of smaller systems. The chronosystem considers the changes that can impact a child's development, including shifts in social norms or personal circumstances that may affect their resilience to bullying and academic trajectory (Hatshwayo, 2018). It accounts for the timing of events in an individual's life and the historical and social contexts in which they occur. For example, a child experiencing parental divorce may struggle to focus on schoolwork and may exhibit disruptive behaviour toward classmates due to a lack of attention or support at home. Research has shown that children may experience the detrimental effects of their parents' divorce for up to a year (Buckley & Budzyna, 2023). The diagram below illustrates an ecological systems theory.

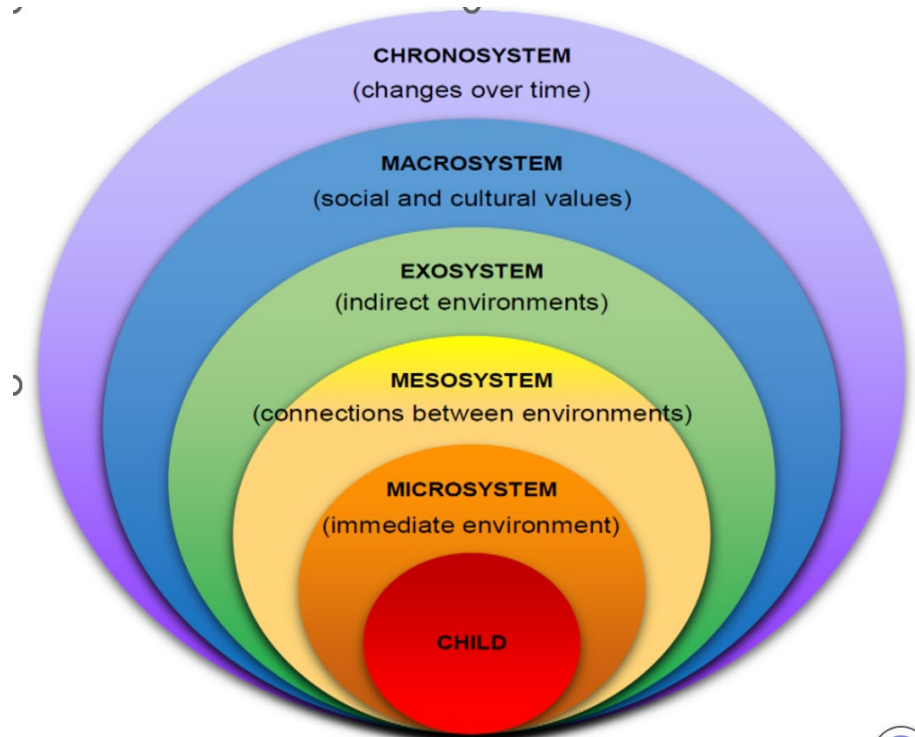


Figure 1: Diagram of the ecological systems theory (Buckley & Budzyna, 2023)

3. Literature Review

This section critically reviews relevant articles on the adverse impacts of bullying violence on learners' academic achievement in schools globally. Academic achievement is defined as limited or no progress in a particular subject due to factors involving the learner, family, social context, and school environment (Al-Zoubi & Younes, 2015). The effects of bullying on learners' academic achievement may include the following: health and physical effects; educational and study-related effects; and psychological effects.

Bullying violence is a matter of public health significance (Mayeza & Bhana, 2021; UNESCO, 2019). The health and physical effects include headaches, poor appetite, depression, fatigue, weight loss or gain, stress, anxiety, and sleeplessness. A survey conducted by UNESCO (2019) found that children involved in bullying reported lower quality of health and life satisfaction compared to those not involved. Furthermore, children who are frequently bullied are at a higher risk of feeling like outsiders at school and are more likely to miss school. Moreover, these children tend to have worse educational outcomes than those who are not bullied (UNESCO, 2019, as cited in Mayeza & Bhana, 2021). Qualitative research by Ngidi and Moletsane (2018) found that bullying has both physical and mental health effects on students who are bullied. Baruth and Mokoena's (2016) study discovered that bullying victims often refuse to return to school, experience post-traumatic stress disorder (PTSD), and exhibit deteriorating educational performance.

The educational effects of bullying violence on learners include lower grades, increased absenteeism, school dropout, difficulty in learning, and difficulty concentrating. In addition, Singh and Steyn (2014) investigated the psychological responses of victims to aggression among learners and highlighted the detrimental effects of such behaviour in educational settings. Learners exposed to violence within school environments often carry emotional scars that hinder their academic

performance due to the trauma they endure (Khumalo, 2019; UNESCO, 2019). A study by Vanlaldusaki et al. (2018) showed that 71.9% of students in India have experienced bullying, which significantly affected their academic performance. Makwanise (2021) found that some students bullied their peers by making them clean their shoes or pressuring them to give money for drugs, particularly those struggling with addiction.

Mayeza and Bhana (2021) additionally revealed instances of psychological bullying, such as teasing and ridicule. Adams and Hannum (2018) examined physical victimisation in Chinese schools, identifying beatings as a significant form of violence experienced by students. They also found that physical victimisation significantly jeopardises students' academic performance. Haroon (2018) revealed that female students are targeted more frequently than their male counterparts. A study by Jan and Hussain (2015) found that bullying has negative consequences for the entire Pakistani school community, affecting how students learn and perform academically. Additionally, students who are bullied are often more likely to exhibit lower academic achievement. Bullying adversely affects students' academic performance by instilling fear and self-doubt, making it difficult for victims to focus on their schoolwork (Al-Raqqah et al., 2017). Also, Muli et al. (2019) conducted a study on bullying and its impact on academic performance in Kenya and found that school bullying significantly contributes to poor academic performance among students.

4. Methodology

The quantitative approach involves gathering numerical data to test objective theories by exploring relationships among variables (Creswell & Creswell, 2018). This study employs a quantitative approach as it allows for a comprehensive understanding of the research problem through numerical data and statistical methods to examine the composite effects of bullying on Grade 10 learners' academic achievement within BCM high schools in the Eastern Cape Province. According to Stats SA (2023) statistics, KwaZulu-Natal had the highest number of children facing violence at school, closely followed by the Eastern Cape.

The choice of Grade 10 participants is due to their being in the first year of the senior class in the South African education system, a critical stage of development for teenagers. Table 4.1 of this study revealed that most respondents were between 15 and 17 years old (90.4%). Only 0.4% of the respondents were 14 years of age, while the remaining respondents (9.3%) were between 18 and 21. Similarly, Harber and Mncube (2017) attribute the issue of violence in South African schools to the wide age gap between learners. Moreover, the learners' ages can span several years within a grade level, leading to antisocial behaviour. For example, Grade 8 learners could be between 12 and 14 years old when they should be 14, Grade 9 learners between 14 and 18, Grade 10 between 15 and 20, and Grade 11 and 12 between 15 and 22 when they should be between 16 and 18. This significant age range within grades has been identified as a key factor contributing to violence in schools (Harber & Mncube, 2017).

The total number of Grade 10 learners at the BCM secondary schools at the time of planning this research was about 14,819, with 7 private and 108 public secondary schools, of which 1,037 Grade 10 learners were included. A proportional stratified and simple random sampling method was used to select participants and schools. The probability was proportionate to the size of each stratum; that is, more female learners than male learners were included in the study to ensure generality and representativeness. This was discussed in the sociodemographic section of this study.

Furthermore, the sample size was calculated using Stoker's sample (Adu, 2020) guideline at a $\pm 7.0\%$ precision level and a population of 14,819. A sample of 1,012 was used for analysis after adjustments for respondents who failed to answer a question by accident or chose not to answer it. Additionally, a pilot study was conducted among 15 Grade 10 learners in two schools to test the reliability of the research instrument, with the Experiences of Bullying subscale comprising eight items, yielding a

Cronbach's alpha of 0.78, indicating high internal consistency, with an average Cronbach's alpha of 0.77. The researcher submitted the findings to her promoter and data analysis experts, who established the questionnaire's validity. The data collected covered the period from June to September 2022. Section A gathered demographic information such as gender, age, and school type, while Section B included eight items to measure learners' experiences of bullying at BCM secondary schools. The study relied on learners' academic performance records, specifically terminal report sheets, to fully explain the effects of bullying and to obtain supplementary information about the respondents. To adhere to the journal's word count, the logistic regression results and appendices are presented in the researcher's thesis for further examination. The table below shows the sampling technique used in this study.

Table 1: Calculated sample size for the study

Types of school	Number of secondary schools	Total in sample	Size of population (total number of Grade 10 learners)	Total in the sample (approximately 7.0%)
Private	7	3	706	50
Public	108	8	14,113	987
Total	115	11	14,819	1,037

Source: ECDoE: EMIS (2019)

4.1 Statistical analysis and ethical considerations

The data analysis employed descriptive and inferential statistics. Descriptive analysis included frequency distribution, percentages, means, skewness, kurtosis, and visualisation tools to summarise the data. Inferential analysis, using multiple regression, was conducted to test the relationship between independent and dependent variables at a 95% confidence level, with alpha values less than 0.05 considered statistically significant. Statistical significance was determined for alpha values less than 0.05. Regression analysis specifically explored the relationship between bullying and the academic achievement of Grade 10 learners. The data were further processed and analysed by a professional data analyst using the Statistical Package for the Social Sciences (SPSS), version 22.

This research was approved by the Inter-Faculty Ethics Committee at the Govan Mbeki Research and Development Centre (GMRDC), University of Fort Hare, under REC number 270710-028-RA Level 01. This approval confirms that the study meets the ethical standards for research. Additionally, permission to conduct the research was granted by the Buffalo City Education District to carry out the study within BCM secondary schools.

5. Presentation of Results

This section summarises the respondents' sociodemographic characteristics using frequency, percentage, and appropriate visualisation techniques. This is important as it reveals the nature and significant characteristics of the study population concerning its gender distribution, age distribution, residence location, and school.

Table 2: Sociodemographic characteristics of respondents

Variables	Frequency	Per Cent
Sex		
Male	442	43.7
Female	570	56.3
Age		
14	4	0.4
15	126	12.5
16	530	52.4

17	258	25.5
18	72	7.1
19	16	1.6
20	4	0.4
21	2	0.2
Location		
Urban	935	92.4
Rural	77	7.6
School Type		
Public	684	67.6
Private	328	32.4

Source: Researcher's fieldwork (2022)

Table 2 shows that most respondents were between the ages of 15 and 17 (90.4%). Only 0.4% of the respondents were 14 years old, while the remaining respondents (9.3%) were between 18 and 21 years old. This is expected, as the participants were high school learners. Just over half of the respondents were female (56.3%); however, the margin is small enough to argue that there was a fair gender distribution. It should also be noted that the ratio of females is higher than that of males in most schools. For instance, in a class of 35 learners, the researcher observed that three-quarters were female while the rest were male. Table 2 also indicates that 92.4% of the respondents lived in urban areas, while the rest resided in rural areas. This implies that the overwhelming majority of the respondents attended urban schools. In addition, more respondents (67.6%) attended public schools than private schools (32.4%).

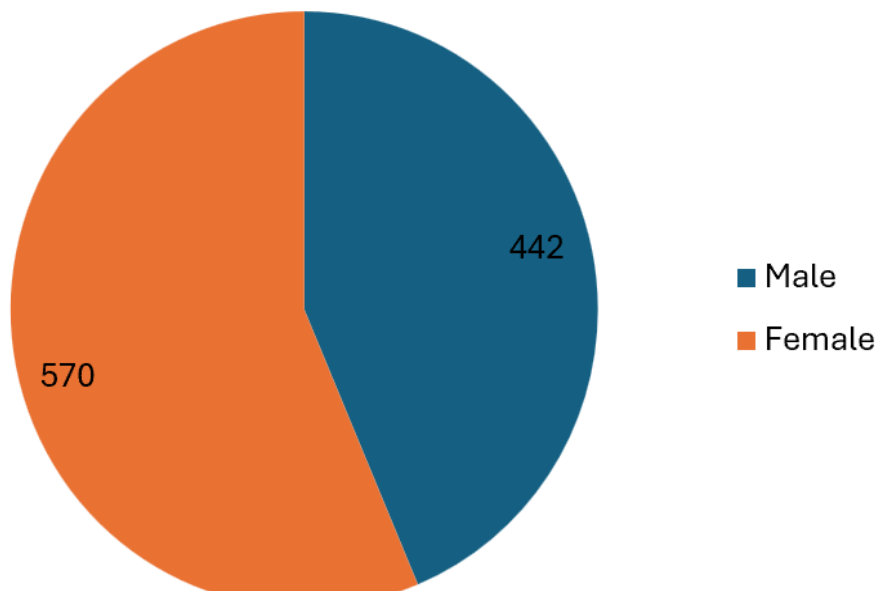


Figure 5.1: Distribution of the respondents based on gender

5.1 The Composite Effect of Bullying on Grade 10 Learners' Academic Achievement in BCM High Schools

This section presents data on the frequency of bullying experienced by Grade 10 learners in BCM high schools, including verbal abuse, physical intimidation, and social exclusion. Although most learners reported not experiencing such incidents, a significant minority indicated repeated exposure, suggesting potential effects on academic achievement.

Table 3: Measuring the experience of bullying in BCM high schools

S/N	Items	Always 5	11-15 times 4	6 -10 times 3	Less than 5 times 2	Never 1
1	During the last week, how many times, if any, has someone made fun of you, called you names, or insulted you at school?	39 (3.9%)	63 (6.2%)	192 (19.0%)	194 (19.2%)	524 (51.7%)
2	During the last week, how many times, if any, has someone spread rumours about you at school?	29 (2.9%)	87 (8.6%)	147 (14.5%)	126 (12.5%)	623 (61.5%)
3	During the last week, how many times, if any, has someone pushed you, shoved you, tripped you, or spat on you at school?	21 (2.1%)	38 (3.8%)	82 (8.1%)	99 (9.8%)	771 (76.2%)
4	During the last week, how many times, if any, has someone threatened you with physical harm at school?	19 (1.9%)	34 (3.4%)	65 (6.4%)	95 (9.4%)	799 (78.9%)
5	During the last week, how many times, if any, has someone tried to make you do something you do not want to do, for example, giving them money or your snacks?	21 (2.1%)	33 (3.3%)	78 (7.7%)	85 (8.4%)	795 (78.5%)
6	During the last week, how many times, if any, has someone destroyed your property on purpose at school?	30 (3.0%)	40 (4.0%)	60 (5.9%)	62 (6.1%)	820 (81.0%)
7	During the last week, how many times, if any, has someone intentionally left you out of class activities at school?	14 (1.4%)	31 (3.1%)	98 (9.7%)	111 (11.0%)	758 (74.8%)
8	During the last week, how many times, if any, has someone used a telephone, text message, or the Internet to say or post hurtful things about you at school?	22 (2.2%)	50 (4.9%)	88 (8.7%)	79 (7.8%)	773 (76.4%)

Source: Researcher's fieldwork (2022)

This section, Table 3, presents the distribution of respondents based on the frequency with which learners experienced being made fun of, being called names, intimidation, spreading rumours, verbal degradation, physical assault, property destruction, exclusion, and insults at school during the past week. The findings indicate that a small proportion of Grade 10 learners in BCM schools experience such forms of bullying. A complete discussion of the findings can be found in Section 6 of this paper.

5.2 Descriptive measurement of bullying

The mean value was used to determine the relative importance of each measure of bullying, providing a more detailed analysis of the data. The standard deviation was calculated to assess the

variability within the data. Additionally, skewness and kurtosis were analysed to ascertain whether the data followed a normal distribution.

Table 4: Descriptive measurement of bullying using mean, standard deviation, skewness, and kurtosis

Measuring Bullying in Schools	Mean	Standard deviation	Skewness	Kurtosis
During the last week, how many times, if any, has someone made fun of you, called you names, or insulted you at school?	4.54	0.94	-2.18	4.05
During the last week, how many times, if any, has someone spread rumours about you at school?	4.52	1.03	-2.17	3.65
During the last week, how many times, if any, has someone pushed you, shoved you, tripped you, or spat on you at school?	4.52	0.96	-2.08	3.54
During the last week, how many times, if any, has someone threatened you with physical harm at school?	4.48	0.93	-1.83	2.65
During the last week, how many times, if any, has someone at school tried to make you do something you do not want to do, for example, give them money or your snacks?	4.48	0.98	1.92	2.89
During the last week, how many times, if any, has someone at school destroyed your property on purpose?	4.44	1.04	-1.79	2.15
During the last week, how many times, if any, have you been excluded from class activities on purpose?	4.10	1.18	-1.02	-0.78
During the last week, how many times, if any, has someone used a telephone, text message, or the Internet to say or post hurtful things about you at school?	3.95	1.16	-0.87	-0.15

Source: Researcher's fieldwork (2022)

Table 4 reveals that the average response to the question, "During the last week, how many times, if any, has someone made fun of you, called you names, or insulted you at school?" is 4.54, with a standard deviation of 0.94. This result indicates that the variation or dispersion of responses around the mean is 0.9. The skewness value for this question is -2.18, which reflects the asymmetry of the data distribution. In this case, the data is negatively skewed. The kurtosis value is 4.05. Kurtosis explains the heaviness of a distribution's tail relative to a normal distribution, which could be long or short. In this case, the distribution is positively long tailed. Similarly, the mean response to the question, "During the last week, how many times, if any, has someone spread rumours about you at school?" is 4.52. This result suggests that the average response value is 4.52, with a standard deviation

of 1.03, indicating a variation of responses around the mean of 1.0. The skewness value is -2.17, indicating a negatively skewed data distribution, while the kurtosis value is 3.56, signifying a positively long-tailed distribution.

The mean value of the response to the question, "During the last week, how many times, if any, has someone pushed you, shoved you, tripped you, or spat on you at school?" is also 4.52, representing the average value of the responses. The standard deviation is 0.96, indicating the degree of variation in responses from the mean. The skewness value of -2.08 means that the data distribution is negatively skewed, while the kurtosis value is 3.54, indicating a positively long-tailed distribution.

The mean value of the response to the question, "During the last week, how many times, if any, has someone threatened you with physical harm at school?" is 4.48, again representing the average value of the responses. The standard deviation is 0.93, indicating the variation of responses around the mean. The skewness value of -1.83 indicates that the data is negatively skewed, while the kurtosis value of 2.65 suggests a positively long-tailed distribution.

For the question, "During the last week, how many times, if any, has someone at school tried to make you do something you do not want to do, for example, give them money or your snacks?" the mean value of the responses is 4.48, representing the average value. The standard deviation is 0.93, indicating the level of variation from the mean. The skewness value of -1.83 indicates that the data is negatively skewed, while the kurtosis value of 2.63 shows that the data distribution is positively long-tailed relative to the mean. Additionally, for the same question, the mean value of the responses is 4.48, representing the average value. The standard deviation is 0.98, reflecting the degree of variation in responses around the mean. The skewness value is 1.92, indicating that the data is positively skewed. The kurtosis value of the data is 2.89, suggesting a heavy distribution of data.

For the question, "During the last week, how many times, if any, has someone destroyed your property on purpose at school?" the mean value is 4.44, representing the average response. The standard deviation is 1.04, indicating the degree of variability in the responses. The skewness value is -1.79, implying a negatively skewed distribution, while the kurtosis value of 2.15 indicates a positive distribution.

For the question, "During the last week, how many times, if any, has someone purposely excluded you from class activities?" the mean value is 4.10, representing the average response. The standard deviation is 1.18, reflecting the level of variation around the mean. The skewness value is -1.02, indicating a negatively skewed distribution, while the kurtosis value is -0.78, implying a negative distribution.

Overall, the analysis reveals that the item "Has someone made fun of you, called you names, or insulted you at school?" was ranked first. This was followed by "Has someone spread rumours about you in school?", which was ranked second. The item "Has someone pushed you, shoved you, tripped you, or spat on you at school?" was ranked third, while "Has someone threatened you with physical harm at school?" was ranked fourth. The results of the skewness and kurtosis analysis indicate that the data set is not normally distributed.

Table 5: Correlation between Grade 10 learners' experiences of bullying and their academic achievement

Variable	Univariate logistic		Multivariate logistic	
	COR [95% CI]	p-value	AOR [95% CI]	p-value
Bullying		<0.004*		<0.003*
Never	0.543 [-1.716-0.497]		0.473 [0.712] 0.315	
Less than 5 times	0.575 [-1.403-0.299]		0.481 [1.843] 0.748	
6 – 10 times	0.978 [-0.505-0.462]		0.945 [0.634] 0.056	
11 – 15 times	1.150 [-0.177-0.452]		0.912 [0.447] 0.674]	
Always	1		1	

Table 5 presents the correlation effect of bullying on grade 10 academic achievement, which was measured using the external factor. This factor was analysed on a five-point Likert scale to measure the students' exposure to bullying and analyse its effect on learner academic performance. On this scale, 5 = Always, 4 = 11 – 15 times, 3 = 6 – 10 times, 2 = Less than 5 times, and 1 = Never.

The adjusted odds ratios (AOR) and confidence intervals (CI) for bullying are as follows:

Never: AOR = 0.473, CI = [-2.208, -0.473],

Less than five times: AOR = 0.481, CI = [-1.843, -0.382]

6–10 times: AOR = 0.945, CI = [-0.634, -0.521]

11–15 times: AOR = 0.912, CI = [-0.263, -0.447]

From the above table, those who have never experienced bullying are 0.748 less likely to fail rather than pass compared to those who have always experienced it. This implies that those who never experience bullying are less likely to perform poorly academically. However, the impact is insignificant if the p-value is greater than 0.05 (p-value = 0.315). This means that the model used to explain this study does not fit well. The level of academic performance is best explained using internal factors such as IQ level; however, this study adopted an external approach, focusing on bullying and violence, to explain academic performance. Those who rarely experience bullying are 0.731 less likely to fail rather than pass compared to those who always experience bullying. This implies that those who rarely experience bullying are less likely to have poor performance in school compared to those who always experience bullying. However, the impact is insignificant if the p-value is greater than 0.05 (p-value = 0.198). This means that the model used in this study does not adequately fit the analysis of academic performance.

Those who sometimes experience bullying in school, compared to those who always experience bullying, are 0.056 less likely to fail than pass. This implies that those who sometimes experience bullying are more likely to perform well academically than those who always experience bullying. However, the impact is insignificant if the p-value is greater than 0.05 (p-value = 0.848). This model is insignificant because it does not fit the analysis of academic performance well. Similarly, those who have experienced bullying many times are 0.092 more likely to fail than pass compared to those who rarely or sometimes experience bullying, but when compared with those who experience bullying always, they are more likely to pass than fail. This means that those who always experience bullying are more likely to perform poorly in their academics compared to those who rarely or sometimes experience bullying. However, those who have experienced bullying many times are more likely to pass compared to those who have always experienced bullying. The p-value is greater than 0.05 (p-value = 0.614), indicating that the impact is insignificant. This suggests that the model used in this study does not adequately explain academic achievement.

6. Discussion of Findings

The results from the composite effect of bullying on Grade 10 learners' academic achievement within BCM secondary schools reveal that 51.7% of respondents had not experienced name-calling, ridicule, or insults at school during the past week. This is comparable to Mosia's (2015) study, which revealed that 61% of victimised learners do not report instances of bullying to school authorities, perpetuating the problem and allowing bullying to continue unchecked. This also aligns with Wallance and Figuera (2018), who emphasised that approximately 20% of children aged 12 to 18 reported being bullied in United States schools.

The results also show that 61.5% of Grade 10 learners did not experience rumours being spread about them; 12.5% experienced rumours fewer than five times, 14.5% experienced them 6-10 times, 8.6% experienced them 11-15 times, and 2.9% reported experiencing them constantly. This contrasts with

the general analysis of Afolabi and Deji (2014), who found that verbal abuse rates were 87.2% in public schools and 62% in private schools, with physical assault rates of 53.3% and 28.7%, respectively. Threats were reported at 18%, weapon-related incidents at 3.3%, and property damage occurred in both public and private secondary schools. The probable reason for the low proportion of responses from the students may be low self-esteem due to shame, or they may not want to talk about their experiences.

Regarding whether the students had experienced being pushed, shoved, tripped, or spat on at school during the past week, the study's respondents revealed that 76.2% had not had such experiences; 9.8% experienced them fewer than five times, 8.1% experienced them 6-10 times, 3.8% experienced them 11-15 times, and 2.1% reported experiencing them constantly. This implies that most respondents did not encounter pushing, shoving, tripping, or spitting at school during the past week. This disagrees with the study of Jan and Hussain (2015), which identified various forms of bullying, such as teasing, hitting, making threats, and mocking others, as common among students.

Afolabi and Deji's (2014) study additionally posits that verbal abuse rates were 87.2% in public schools and 62% in private schools, physical assault rates were 53.3% and 28.7%, respectively, with threats at 18%, weapon-related incidents at 3.3%, and property damage occurring in Nigerian secondary schools. This present study revealed that the majority, 78.9% of respondents, had not experienced physical harm or threats; 9.4% experienced them fewer than five times, 6.4% experienced them 6-10 times, 1.9% experienced them 11-15 times, and 2.1% reported experiencing such threats constantly. It can be summed up that most of these learners are not ready to share their experiences of bullying and violence in their schools. This aligns with the findings of Makafane (2019) in Okeke et al. (2024), who found that victims of bullying not only perform poorly in school subjects but also exhibit characteristics such as fear of speaking out, low self-esteem, and depression due to continuous bullying at school.

This study further shows that 78.5% of respondents reported not having someone attempt to compel them to engage in unwanted activities, such as extortion, at school during the past week. 8.4% experienced these incidents fewer than five times, 7.7% experienced them 6-10 times, 3.3% experienced them 11-15 times, and 2.1% reported experiencing them constantly. These findings agree with the study of Makwanise (2021), who found that some students bullied their peers by making them clean their shoes or pressuring them to give money for drugs, especially those struggling with addiction. This finding might be supported by Ngidi and Moletsane (2018), who revealed that bullying has physical and mental health effects on students, particularly those who were intentionally excluded from class activities at school during the past week. A majority (74.8%) of respondents reported not having such experiences, while 11% experienced exclusion fewer than five times, 9.7% experienced it 6-10 times, 3.1% experienced it 11-15 times, and 1.4% reported experiencing it constantly. Children who are frequently bullied are at a higher risk of feeling like outsiders at school and are more likely to miss school (UNESCO, 2019).

Furthermore, this study shows that a majority, 76.4% of respondents, reported that they had not been hurt by someone who used a telephone, text message, or the internet to say hurtful things about them; while 7.8% experienced these incidents fewer than five times, 8.7% experienced them 6-10 times, 4.9% experienced them 11-15 times, and 2.2% reported experiencing them constantly. These findings align with the conclusion that bullying adversely affects students' academic performance by instilling fear and insecurity, making it difficult for learners to focus on their schoolwork (Al-Raqqa et al., 2017). These findings are consistent with Vanlaldusaki et al.'s (2018) study, which revealed that bullying has a long-term detrimental effect on learners, particularly regarding their academic performance. Moreover, the adoption of Bronfenbrenner's ecological systems theory in this study is important because it emphasises the critical role of positive relationships in mitigating the

potential harm caused by hostile and non-conducive environments (Bronfenbrenner, 1979, in El Zaatari & Maalouf, 2022, p. 3).

7. Conclusions and Recommendations

This study concluded that a notable, though relatively small, proportion of Grade 10 learners in Buffalo City Metropolitan (BCM) schools had experienced various forms of bullying. These included intimidation, verbal degradation, the spreading of rumours, physical assault, coercion, property destruction, social exclusion, and name-calling. The significance of this finding lies in its implications for school stakeholders—administrators, teachers, and curriculum developers—who must recognise the serious impact of bullying on learners' well-being and academic performance. By raising awareness among learners about the importance of reporting incidents of bullying and violence, schools can foster safer and more supportive environments, which are essential for improved academic outcomes. The study thus adds to the body of research on school violence by specifically highlighting its effects on Grade 10 learners within the BCM context.

In light of the study's findings, several recommendations are proposed to mitigate bullying in schools. Firstly, the Department of Basic Education should invest in comprehensive educational programmes that promote emotional intelligence, conflict resolution, and effective communication skills, as these can prevent violent behaviour among learners and in the broader community. Secondly, school administrators must prioritise teacher training focused on recognising and addressing early signs of violence, alongside providing support for at-risk students. Thirdly, teachers are encouraged to cultivate a nurturing and inclusive classroom environment by proactively addressing all forms of bullying, including physical, verbal, and social aggression. Parents and guardians also play a critical role; they should actively monitor their children's behaviour, especially in digital spaces, and maintain open communication with educators. Furthermore, learners should be encouraged to engage in activities that promote positive peer relationships and a sense of belonging. According to Bronfenbrenner's ecological systems theory, such social interactions are central to learner development and can significantly influence academic success.

7.1 Suggestions for further research

While this study concentrated on external forms of bullying—such as physical harm, exclusion, and verbal abuse—it did not account for internal learner factors that may also influence academic achievement. Future research should consider exploring variables such as intellectual capacity, learning style, and assimilation rate to gain a more nuanced understanding of how bullying affects educational outcomes. A more holistic approach that examines both the internal and external dynamics at play will provide deeper insights into the academic and psychosocial development of learners affected by bullying.

7.2 Limitations in the study

Although this study found that a small number of grade 10 learners indicated that they had experienced forms of bullying violence in their schools, at the same time, the majority do not want to talk about their experience. It is important to note that this study targeted a sample of 1,037 Grade 10 learners from Buffalo City Metropolitan Municipality private and public secondary schools in the Eastern Cape Education Province. Thus, the findings may not be generalised to other education provinces in South Africa due to the sample restriction and the study's design.

8. Declarations

Author Contributions: Conceptualisation (S.A.O., S.M. & N.D.); Literature review (S.A.O., S.M. & N.D.); methodology (S.A.O.); software (N/A.); validation (S.M. & N.D.); formal analysis (S.A.O.); investigation (S.A.O.); data curation (S.A.O., S.M. & N.D.); drafting and preparation (S.A.O. & S.M.);

review and editing (S.A.O.); supervision (S.M. & N.D.); project administration (S.A.O.); funding acquisition (N/A). All authors have read and approved the published version of the article.

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Data Availability Statement: The data supporting this study are currently under embargo and will become publicly available in March 2026 through the University of Fort Hare EDT system. Researchers may contact the corresponding author for further details regarding future access.

References

- Adams, J., & Hannum, E. (2018). School violence in China: A multilevel analysis of student victimisation in rural middle schools. In *Research in the Sociology of Education* (pp. 41–69). Emerald Publishing Limited. <https://doi.org/10.1108/S1479-353920180000020003>
- Afolabi, O. T., & Deji, S. A. (2014). A comparative study on the prevalence of violence among adolescents in public and private schools in Osun State, Nigeria. *Advances in Tropical Medicine and Public Health International*, 2(32), 32–40.
- Al-Raqqaq, H. K., Bourini, E. S., Talahim, F. M., & Araki, R. M. E. (2017). The impact of school bullying on students' academic achievement from the teachers' point of view. *International Education Studies*, 10(6), 44–50. <https://doi.org/10.5539/ies.v10n6p44>
- Analisah, C. D. C., & Indartono, S. (2019, June). Ecological theory: preventing student bullying to promote culture of peace. In *International Conference on Social Science and Character Education (ICoSSCE, 2018) and International Conference on Social Studies, Moral, and Character Education (ICSMC 2018)* (pp. 239–244). Atlantis Press.
- Al-Zoubi, S. M., & Bani Younes, M. A. (2015). Low academic achievement: Causes and results. *Theory and Practice in Language Studies*, 5(11), 2262–2268. <http://dx.doi.org/10.17507/tpls.0511.09>
- Bezuidenhout, C. (2018). *Child and youth misbehaviours in South Africa: A holistic approach* (4th ed.). Van Schaik Publishers.
- Buckley, D., & Budzyna, D. (2023). The whole child: Development in the early years. Pressbooks.
- Cresswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.
- El Zaatari, W., & Maalouf, I. (2022). How the Bronfenbrenner bio-ecological system theory explains the development of students' sense of belonging to school? *Sage Open*, 12(4), 21582440221134089. <https://doi.org/10.1177/21582440221134089>
- Etheridge, J., & Ngqkamba, S. (2019, March 13). Boy, 13, from nearby school arrested after a Mondeor High School pupil was stabbed to death. *News24*, 1–8.
- Harber, C., & Mncube, V. S. (2017). *Violence in schools: South Africa in an international context* (1st ed.). Pretoria: UNISA Press.
- Haroony, T. (2018). Impact of bullying on academic performance of high school students. *International Journal of Multidisciplinary Educational Research*, 4(3), 1–10.
- Hlatshwayo, P. M. (2018). The nature and prevalence of gang-related violence on learners in secondary schools in the Lejweleputswa District. *Dissertation submitted to the Central University of Technology, Free State, South Africa*. 1–166.
- Jan, A., & Husain, S. (2015). Bullying in elementary schools: Its causes and effects on students. *Journal of Education and Practice*, 6(19), 43–56.

- Joubert, R., Du Plessis, P., Mahlangu, V. P., & Prinsloo, I. J. (2015). *The law of education in South Africa*. Van Schaik Publishers.
- Khumalo, S. S. (2019). Implication of school violence in South Africa on socially just education. *Journal of Social Science and Humanitarian*, 16(8), 1-12.
- Mayeza, E., & Bhana, D. (2021). Boys and bullying in primary school: Young masculinities and the negotiation of power. *South African Journal of Education*, 41(1), 1-8.
<https://doi.org/10.15700/saje.v41n1a1858>
- McWhirter, J. J., McWhirter, B. T., McWhirter, E. H., & McWhirter, A. C. (2017). *At-risk youth: A comprehensive response for counsellors, teachers, psychologists, and human service professionals* (6th ed.). Cengage Learning.
- Mosia, P. A. (2015). The prevalence of bullying at high schools in Lesotho: Perspectives of teachers and students. *Africa Education Review*, 12(2), 161-179.
<http://dx.doi.org/10.1080/18146627.2015.1107971>
- Muli, M. N., & Muthee, J. (2019). Prevalence of bullying behaviour on academic performance among students in integrated public secondary schools in Kitai Country, Kenya. *International Journal of Research and Innovation in Social Science*, 3(11), 239-242.
- Ngidi, N. D., & Molesane, R. (2018). Bullying in school toilets: Experiences of secondary school learners in a South African township. *South African Journal of Education*, 38(1), 1-8.
<https://doi.org/10.15700/saje.v38ns1a1588>
- Okeke, C., Akobi, T., & Maseli, M. (2024). The perceived impact of bullying on academic performance of high school learners. *Webology*, 21(1), 1.13.
- Olusegun, A. (2017). *Awareness, causes, and prevalence of bullying behaviour among secondary school students in Kosofe area of Lagos state* [Master's dissertation, Akoka Education Foundation].
- Power, T. (2017). School violence. In F. Veriana, A. Thom, & T. T. Hodgson (Eds.), *Basic education rights handbook: Education rights in South Africa* (Chapter 17, pp. 202-309). Section 27.
- Reddy, V., Visser, M., Winnaar, L., Arends, F., Juan, A., Prinsloo, C., & Isdale, K. (2016). *TIMSS 2015: Highlights of Mathematics and Science achievement of Grade 9 South African learners*. Human Sciences Research Council.
- Paulmony, R., Vasanthakumari, S., Singh, B., Almashaqbeh, H. A., Kumar, T., & Ramesh, P. (2022). The impact of bullying on academic performance of students in the case of parent communication. *International Journal of Early Childhood Special Education*, 14(1), 2325-2334.
<https://doi.org/10.9756/INT-JECSE/V14I1.273>
- Singh, G. D., & Steyn, T. (2014). The impact of learner violence in rural South African schools. *Journal of Sociology and Social Anthropology*, 5(1), 81-94.
- Statistics South Africa. (2023, February 28). *The missing piece of the puzzle: Educational article on children series volume 1 – Children exposed to maltreatment, 2021, published*. Pretoria, South Africa: Statistics South Africa (StatsSA).
- Adu, K. O. (2020). *Learning styles, availability, and utilisation of instructional materials as correlates of grade 6 learners' mathematics performance in Buffalo City* [Master's thesis, University of Fort Hare].
- United Nations Educational, Scientific, and Cultural Organisation (UNESCO). (2019). *Behind the numbers: Ending school violence and bullying*. France: Global States Report.
<https://unesdoc.unesco.org/ark:/48223/pf0000366483>
- Vanlaldusaki, L., Lako, V., Visi, V., Sangma, Z. S., Saravanan, K., & Singh, A. B. (2018). Peer victimisation among higher secondary school students in Imphal: A cross-sectional study. *IOSR Journal of Humanities and Social Sciences*, 33(3), 47-50.
- Wallance, W. C., & Figuera, R. (2017). An analysis of the characteristics of school violence in small island developing states using educators' experiences from four Caribbean countries. *International Journal on Criminology*, 5(2), 100-124.

- Ward, C. L., van der Merwer, A., & Dawes, A. (2012). *Youth violence: sources and solutions in South Africa*. University of Cape Town Press.
- Winnar, L., Arends, F., & Beku, U. (2018). Reducing bullying in schools by focusing on school climate and school socio-economic status. *South African Journal of Education*, 38(1), 1-10. <https://doi.org/10.15700/saje.v38ns1a1596>
- Zondo, S. S. (2022). *Code of conduct for learners: A strategy for enhancing positive discipline in selected township schools in Durban, KwaZulu-Natal* [Doctoral dissertation, University of Fort Hare].

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