Mediterranean Journal of Social & Behavioral Research

2023, 7(3), 161-168 ISSN 2547-8559 (Print) ISSN 2547-8567 (Online)

https://www.mjosbr.com/

Research Article

OPEN ACCESS



Effect of Inhibitory Modelling Technique in modification of bullying behavior among secondary school boarding students

Halimat Bashir Ibrahim 1 , Abbas Sani Dahiru 2 , Akilu Isma'il 2* 0

Citation: Ibrahim, H. B., Dahiru, A. S., & Isma'il, A. (2023). Effect of Inhibitory Modelling Technique in modification of bullying behavior among secondary school boarding students. *Mediterranean Journal of Social & Behavioral Research*, 7(3), 161-168. https://doi.org/10.30935/mjosbr/13401

ABSTRACT

This study investigated the effect of inhibitory modelling technique (IMT) in modification of bullying behavior among senior secondary school boarding students in Zaria, Kaduna State, Nigeria. The pre-/post-test quasi experimental control group design was adopted. The entire senior secondary two boarding students in Zaria constituted the population for the study. The sample for the study was 282 (172 males and 110 females) students drawn from three boarding secondary schools. Two intact classes in each of the three schools were used. The treatment package for the experimental group was IMT. To establish the relative effect of the treatment in modifying bullying behavior, both experimental and control group were pre- and post-tested using research instrument titled involvement and attitude bullying rating scale. The instrument was validated and have the reliability coefficient of 0.87. Four hypotheses were formulated and were tested using t-test at the α =0.05 level of significance. The study revealed that IMT emerged superior to traditional school counselling technique for modifying attitude to, and involvement in bullying among secondary school boarding students. IMT was also found to be effective for modifying both male and female participants' attitude to, and involvement in bullying. It was recommended among other that school counsellors should adopt IMT as an anti-bullying intervention for counselling secondary school students against bullying as well as for prevention or modification of bullying behavior in boarding schools.

Keywords: boarding secondary school, bullying, anti-bullying, intervention, inhibitory modelling technique, counselling

Received: 10 Mar. 2023 ◆ Accepted: 27 May 2023

INTRODUCTION

Bullying, in all of its forms, has been recognized as one of the most highly prevalent antisocial behaviors in the world (Williams et al., 2023). It is a widespread public problem with significant behavioral and mental health consequences (Fei et al., 2022; Williams et al., 2023). It can be seen in the family, private and the public sectors such as military, the political arena, social services, educational settings among others. Ekwelundu (2022) stated that bullying could happen to children or adults at home, public facilities, buses, parks, neighborhoods, schools, the Internet, or through phone communication such as texting and photo manipulation on social media sites like Facebook. Hence, there is school bullying, workplace bullying, family bullying, cyber-bullying etc. Therefore, bullying is a maladaptive behavior that can occur anywhere (Ekwelundu, 2022). More so, people's participation in bullying is diverse, this is because it takes numerous practices or ways of causing pain to the victims.

Olweus and Limber (2010) asserted that a lot of bullying happens without any apparent provocation on the part of the person being bullied, thus could be regarded as a form of abuse. However, the context in which bullying occurs, as well as the relationship of the parties involved, distinguishes it from other forms of abuse such as child abuse and domestic violence (Olweus & Limber, 2010). Bravo-Cedeño and Avila-Rosales (2022) regarded bullying as an extreme form of school violence. On the forms of bullying, Pfeiffer and Pinquart (2014) expressed that

Physical bullying or aggression is characterized by observable behaviors including being hit, physical threats, and blackmail. In contrast, relational forms of bullying include more subtle and of aggression such as spreading untrue rumors, and social exclusion. Furthermore, new possibilities of relational bullying arise in new media by using the internet or social networks (cyberbullying) (Pfeiffer & Pinquart, 2014, p. 581-582).

¹Faculty of Education, National Open University of Nigeria, Gusau Study Center, Lagos, NIGERIA

² Faculty of Education, Federal University Gusau, Gusau, NIGERIA

^{*}Corresponding Author: akilu@fugusau.edu.ng

According to Aluede (2011), there appears to be disagreement on how the term bullying should be defined. Nonetheless, Fatah et al. (2022) defined bullying as an intentionally aggressive behavior, repeated for a long time, and involves an imbalance of power. Ponce et al. (2021) defined bullying as a person's constant exposure to aggressions, either physically or emotionally. Ponce et al. (2021) identified indirect forms bullying to include "teasing, name-calling, threats, ridicule, aggravation, taunting, hazing, social exclusion, or rumors or gossips" (p. 3). Bullying can therefore be described as a deliberate hurtful and often violent or devious behavior or acts committed by one or more individuals against the other, typically carried out repetitively over a particular range of time.

Bullying occurs in a variety of settings, particularly organized communities such as schools (secondary, boarding schools and tertiary institutions) (Ekwelundu, 2022). It has become an increasingly serious problem in today's schools. Ossa et al. (2021) maintained that bullying remains a social issue that affects millions of students of all ages worldwide. Thus, it is widespread among school students (Lu et al., 2022; Nguyen et al., 2022; Olweus & Limber, 2010; Ossa et al., 2021; Sihidi & Amirudin, 2022; Williams et al., 2023). Therefore, school bullying has sparked widespread national and international concern in recent years due to its multifaceted negative impacts on students and the general society. It is prevalent among secondary school students due to many influences. Some of these influencing factors are the students' age and youthful exuberant that occurs during adolescent period, which is characterized as full of anxiety, disposition, identity crises, passionate urge to gain recognition among peers or be accepted as a member of a group. However, according to Kilicaslan et al. (2022), the prevalence of bullying is dependent on many factors, such as the type of bullying, geographical location, and how bullying is defined.

Schools are classified as physically conducive if they can create a peaceful or peaceful atmosphere, however, there are several circumstances that cause a school to no longer be peaceful for its students (Saprilia, 2022). Ideally, according to Ponce et al. (2021), the school environment should be a safe place for each student, where they can go to learn without any fear. The authors further expressed that students' school experiences are critical to their successful transition into adulthood. This is due to the fact that this is where they develop social skills, explore and refine their strengths, try to deal with vulnerabilities and also build citizenship and character. Unfortunately, several secondary school students are exposed to unfriendly environments as a result of the breakdown of families, public disorder in society (Otta, 2007). Also, accessibility and affordability of internet technology among others hinders the chances or enabling atmosphere for school age children to acquire social skills essential for effective social interactions with their peers (Wilson et al., 2003). School children uses the facilities to significantly get exposed to aggressive behaviors and ills attitudes to others at home, school, and in society.

Ekwelundu (2022) indicated that school bullying occurs in places, where children and adolescents are less visible and supervised by teachers and staff, such as toilets, hallways, playgrounds, classrooms, changing rooms, and corridors. Composition of the peer group that is made up of children or adolescents from different backgrounds could be the main contributing factor to school bullying. This is because ill-behaved or bad eggs are likely to be found in the group, whose influence frequently leads to criminal tendencies such as bullying, petty stealing etc. Ponce et al. (2021) defined school bullying as the victimization and

intimidation of students by their peers in the school environment. It occurs when students are repeatedly intimidated or victimized by powerful peers over a long period of time (Ponce et al., 2021). Chu et al. (2019) sees school bullying as an intentional aggressive behavior involving perpetrators and victims in school settings, and it primarily consists of physical and verbal attacks, as well as social exclusion.

Chen et al. (2023) reported that multiple research studies have shown that bullying occurs at a rate of 16.00%-36.00% among middle school students. Song et al. (2019) reported that 57.29% of junior high school students in China had suffered from at least one type of school bullying in the past year. A study conducted in Nigeria by Raji et al. (2019) revealed that 51.10%, 22.70%, 8.40%, and 35.80% in-school adolescents had experienced physical, verbal, relational, and damageto-property victimization, respectively. Overall, 65.60% had experienced at least one type of bullying victimization. More so, research findings revealed, students at boarding schools experienced more bullying than those at day schools (Nugrohoand & Ainyfardhana, 2018; Pfeiffer & Pinquart, 2014). Boarding school system provide students with a semi-permanent institution for education, housing, and food. On this note, Pfeiffer and Pinquart (2014) highlighted that attending a boarding school means being separated from parents, former friends, and familiar surroundings, thereby limiting the impact of parenting practices aimed at preventing or reducing negative behaviors. This circumstance provide more opportunities for bullying.

Therefore, it is not surprising that bullying incidents are more common at boarding schools than at day schools. Students share more time for interaction with peers at boarding school and do not have the opportunity to leave the groups in the way day students do, hence providing opportunities for victimization (Brien, 2016; Francia & Edling, 2016; Nugrohoand & Ainyfardhana, 2018; Pfeiffer & Pinquart, 2014). In the same vein, Raji et al. (2019) revealed that students in boarding schools were practically five times more probable to be victims of bullying compared to those attending day schools. This could explain the finding of Pfeiffer and Pinquart (2014) that lower levels of life satisfaction is more evident among bullied boarding students than bullied day students. Francia and Edling (2016) regarded bullying at boarding school as "boarding school syndrome", which refers to the types of violence experience by students such as: bullying, violence and annoyances. It is worthy to note that many of the issues that arise during childhood or adolescence are likely to persist into adulthood.

Bullying is understood to be a stage in life of every adolescent, especially those attending boarding schools, which they must undergo. Olweus and Limber (2010) stated that several decades of studies confirm that children and adolescents who are bullied are likely to be severely impacted in a variety of ways. For instance, bullying among secondary school students has been connected to an "increased risk of poor academic performance, low self-esteem, anxiety, depression, and even self-harm behaviors" (Chen et al., 2023, p. 2). More so, Olweus and Limber (2010) reported some of the implications of bullying to include social isolation, psychosomatic problems, severe mental health problems such as psychotic symptoms and suicidal ideation. Bullying is also known to interrupts the peace and tranquility required for schools to function normally. It obstructs children's normal processes of development and impedes their stress-free transition through adolescence, making them less productive in the society. Bullies may hit, kick, or coarse people to handover money, or they may tease them repeatedly. The victim of bullying finds it hard to stop the bullying and is always feel concerned or terrified for its repeated reoccurrence. Bullying is responsible for the majority of violent behavior and indiscipline in secondary schools. Lessons are habitually disrupted, lives are jeopardized, and school administrators devote significant time and resources in addressing bullying-related issues.

Matsani (2022) revealed that both male and female students have similar attitude and involvement in bullying and are exposed to similar levels of victimization. But Ponce et al. (2021) reported that female are typically more relational than male with females reporting more positive attitudes than males. Many students irrespective of gender are coerced into joining cults as shields or covers from being bullied. The bullies are more likely ends up joining cult or groups leading to the formation of a fearsome cult that will wreck any opposition. There are also instances, where bullying results to death. For example, the dead of a student at Dowen College (a boarding school in Nigeria) on November 30, 2021. Before this unfortunate incident, there was another case of the death of 14-year-old Karen-Happuch, a student of Premier Academy, Abuja, Nigeria. This instances further affirmed how dangerous school bullying could be. Furthermore, an anecdotal records have shown that bullying exits in many boarding secondary schools in Nigeria and has continue to grow and sparks controversy. Boarding school managers have been reportedly made some efforts to cover up cases of bullying in their schools while parents have been expressing their discontentment over the cruel action being meted on some children in such schools. Brien (2016) reported that attitudes to bullying do not always reflect behavior. The student's attitudes and involvement in bullying behavior is diverse in the sense that bullying takes various forms or patterns and causes varying degrees of physical, psychological, and emotional pain to the victims (Ekwelundu, 2022). Salmivalli et al. (2005) stated that there is a discrepancy between students' attitudes and their actual behavior in bullying situations. They also suspected that this may be an important factor contributing to the persistence of the bullying (Salmivalli et al., 2005). Thus, Salmivalli et al. (2005) posed that changing attitudes might be a good starting point, but an even more critical question in intervention work may be how to convert the antibullying attitudes into actual behavior in bullying situations. The entire situation appears to be terrible and clearly stances serious intimidations to the achievement of the secondary educational goals outlined by Federal Republic of Nigeria (2013) in national policy on education, which unequivocally mentioned that secondary education is intended to "raise a generation of people who can think for themselves, respect the views and feelings of others, respect the dignity of labor, appreciate the values outlined in our broad national goals, and live as good citizens" (p. 18). Again, several international investigations have highlighted the difficulties in combating violence at boarding schools due to their unique characteristics (Francia & Edling, 2016).

In recent years, the number of studies on bullying has increased with the frequent media coverage of aggression among students in schools, and it has become one of the important research topics that researchers focus on (Matsani, 2022). Creating a safe environment and instilling confidence in students encourages them to feel comfortable and to speak up if they are being harassed; for this reason, anti-bullying campaigns are suggested. (Bravo-Cedeño & Avila-Rosales, 2022). Allen (2010) argued that school anti-bullying interventions may produce modest positive outcomes. In a review of 26 anti-bullying interventions that were designed to reduce bullying and victimization, Vreeman and Carroll (2007 cited in Allen, 2010) reported a mixed success. Some resulted in reductions, while others did not.

Badejo and Ubangha (2002) emphasized that it is possible to successfully help out bullies and their victims with intervention based on the ideologies of cognitive restructuring and assertiveness training. A research by Ikeagu (2006) revealed that providing encouragement to students as well as assisting them in mastering important skills to tackle bullying and understanding concepts related to bullying are highly recommended for teachers than using reprimands such as beating, rebuking, suspension, expulsion etc. Omoteso (2010) listed five antibullying strategies or skills that students applied in coping with bullying as thus: bullying the person back (18.30%), reporting to school authority/counsellor (81.10%), absconding from school for long time (6.30%), avoiding person (52.40%) and telling their parents (64.70%).

It appears that adequate anti-bullying initiatives and procedures have yet to be developed in order to effect positive behavioral and attitudinal changes toward bullying behavior among school students. However, while several studies on anti-bullying programs (preventive and intervention) on changing attitudes, intentions, involvement in bullying have been conducted in many other countries, such studies in Nigerian secondary schools were limited, and the few that were conducted were mostly in the southern part of the country (e.g., Aluede, 2011; Badejo & Ubangha, 2002; Egbochukwu, 2007; Jegede et al., 2008; Nwankwo & Unachukwu, 2006; Obe, 2009; Omoteso, 2010; Sullivan et al., 2005). Again, majority of these studies were carried out in mainstream secondary schools using survey, with recommendations based on reviewed literature instead of experimental findings. This suggested the need to broaden the research to other parts of Nigeria using boarding schools. The present study was designed against this background to contribute to existing studies on bullying interventions by experimentally exploring the relative effectiveness of inhibitory modelling technique (IMT) in modification of bullying behavior among senior secondary school boarding students in Zaria, Kaduna State, Nigeria. To achieve this, following objectives were formed:

- (a) To determine the effect of IMT in modifying attitudes of senior secondary school boarding students towards bullying.
- (b) To determine the effect of IMT in modifying involvement of senior secondary school boarding students in bullying behaviors.
- (c) To determine the effect of IMT in modifying attitudes of male and female boarding students towards bullying.
- (d) To determine the effect of IMT in modifying involvement of male and female boarding students in bullying behaviors.

Based on the above objectives, it was hypothesized that

- (a) There is no significant difference in the attitudes towards bullying between participants who were exposed to IMT and those were not.
- (b) There is no significant difference in the involvement in bullying behaviors between participants who were exposed to IMT and those were not.
- (c) There is no significant difference in the attitudes towards bullying between male and female participants who were exposed to IMT.
- (d) There is no significant difference in the involvement in bullying behaviors between male and female participants who were exposed to IMT.

METHODS

Design

This study adapted pre-/post-test quasi-experimental research design. The study used two groups: experimental and control. Experimental group received experimental treatment, which is counselling using IMT, while control group received conventional/traditional school counselling for the period of six weeks.

Study Area

The study was carried out in Zaria Local Government Area, Kaduna State. Zaria lies in the Northern Guinea Savanna Zone of Nigeria, between latitude 11°15′N and 11°3′N of the equator and longitude 7°30′E and 7°45′E of the Greenwich meridian (Isma'il et al., 2016).

Population

The population for this study is the entire senior secondary two (SS 2) students in boarding schools in the Zaria, Kaduna State. There are four boarding secondary schools with population of 1,142 students in the study area.

Sample and Sampling Techniques

Before selecting the sample, pre-test was administered to the four boarding schools to ensure that the samples chosen are significantly not different in their bullying attitude and behavior. Three boarding schools namely, Alhudahuda College, Government Secondary School (WTC), and Barewa College were found not significantly different and therefore used. Two intact SS 2 classes in each of the three schools were randomly sampled, which gave rise to the sample size of 282 (172 males and 110 females) participants.

Data Collection Tool

The instrument used for data collection was involvement and attitude to bullying rating scale (IABRS) adapted from Ettu (2011). The IABRS was sub-divided into sections A to E. Section A to D consist of items relating to involvement in bullying while section E was on attitude to bullying. IABRS was subjected to validation by three qualified experts with PhD who specialized in the field of guidance and counseling. The reliability for the instrument was found to be 0.87.

Treatment Procedure

The experimental groups were given a treatment using a package IMT adapted from Ettu (2011). The overall objective of the package is to give participants the opportunity to hear or see some of the unpleasant experiences of students and ex-cultists who have bullied in the past in order to serve as deterrents to the participants. The inhibitory models were the ex-bullies, inmates with past bullying experience, and ex-cultist(s). IMT was administered to the experimental group in six sessions. Each session are carefully planned to get the best attention of the participants and also give room for interaction. The sessions are briefly highlighted below.

Session one

Briefing for awareness of the intervention at school with principal, staff and students in attendance. Explanation on bullying as deviant, anti-social and self-defeating behavior. Identification of bullying behaviors and their consequences in the schools by the participants.

Session two

Presentation of the models, former boarding school student(s) (exbullies or ex-cultists) to share their experiences to elicit the inhibitory modelling effect on the participants. Interactive time with the model(s), reflective discussions on the consequences of bullying on the model(s).

Session three

Review of previous day's activities, presentation of the second model(s), former boarding school student(s) (ex-bullies or ex-cultists) to share their experiences to elicit the inhibitory modelling effect. Interactive time with the second model(s), reflective discussions on the consequences of bullying on the model(s).

Session four

Excursion to Nigerian Correctional Center in Zaria to listen to the teenage detainees with particular reference to the reactive bullying history (permission and their consent were sought). However, this session may be skipped if the permission to warrant the excursion proved difficult.

Session five

Reflective discussions on the consequences of bullying on the teenage detainees (inhibitory model(s)).

Session six

Video show portraying lasting consequences of bullies who are school dropouts or expelled from school. General discussions, questions and answers on attitudes to, involvement in, and consequences of bullying.

The control group did not receive any treatment. However, they continue to be under the conventional/traditional school counselling were school counsellors (if there is any) and/or schoolteachers serves as mediators.

Data Collection

Both experimental and control groups were pre- and post-tested using IABRS.

Data Analysis

Null hypotheses were tested using t-test statistic at 0.05 level of significance.

RESULTS

 H_{OI} . There is no significant difference in the attitudes towards bullying between participants who were exposed to IMT (experimental group) and those were not (control group).

Table 1 shows that t-value computed is 8.02 and p-value of 0.00 is observed at df of 280. Since critical p-value of 0.00 is less than alpha value of 0.05, there is a significant difference in attitude to bullying behavior of subjects in experimental and control group. A significant difference indicates rejection of the null hypothesis. The significant difference is in favor of experimental group because their mean scores reveal a reduction of their attitudes towards bullying behaviors.

HO2. There is no significant difference in the involvement in bullying behaviors between participants who were exposed to IMT (experimental group) and those were not (control group).

Table 1. t-test analysis of attitude to bullying behavior scores of participants

Variables	n	Mean	Standard deviation	df	t-value	t-critical	p-value	Decision
Experimental	138	16.20	6.37	280	8.02	2.26	0.00	Significant
Control	144	30.70	0.95					

Table 2. t-test analysis of involvement in bullying behavior scores of participants

Variables	n	Mean	Standard deviation	df	t-value	t-critical	p-value	Decision
Experimental	138	26.50	3.99	280	12.36	1.98	0.00	Significant
Control	144	38.98	6.47					

Table 3. t-test analysis of attitude to bullying between male & female students who were exposed to IMT

Variables		n	Mean	Standard deviation	df	t-value	t-critical	p-value	Decision
IMT	Male	172	38.72	8.15	280	3.25	2.0	0.21	Not significant
	Female	110	39.54	7.51					

Table 4. t-test analysis of involvement in bullying between male & female students who were exposed to IMT

Variables		n Mean		Standard deviation	df	t-value	t-critical	p-value	Decision
IMT	Male	172	28.42	3.83	280	2.16	2.0	0.08	Not significant
	Female	110	26.60	4.29					

Table 2 reveals that the t-value computed is 12.36 and the p-value of 0.00 is observed at df of 280. Since the critical p-value of 0.00 is less than the alpha value of 0.05, there is a significant difference in the involvement to bullying behavior of the experimental and control groups. Thus, the null hypothesis is rejected. The significant difference is in favor of experimental group as their mean scores shows a significant reduction in their involvement in bullying.

HO₃. There is no significant difference in attitudes towards bullying between male and female participants who were exposed to IMT.

From the result in **Table 3**, it is observed that in the experimental group, the t-value of 3.25 is obtained and the p-value observed is 0.21 at the df of 280. The p-value of 0.21 is greater than the alpha value of 0.05. This shows that there is no significant difference between the male and female students' attitudes towards bullying after intervention. A no significant difference infers retaining of null hypothesis.

HO4. There is no significant difference in the involvement in bullying behaviors between male and female participants who were exposed to IMT.

Table 4 shows that the t-value of 2.16 is obtained and the p-value observed is 0.08 at the df of 280. The p-value of 0.21 is greater than the alpha value of 0.05. This shows that there is no significant difference between male and females in the experimental group after the intervention. Therefore, the null hypothesis is retained.

DISCUSSION OF FINDINGS

From the findings in **Table 1** and **Table 2**, the study revealed that experimental group recorded a drastic reduction in their mean scores than control group, which shows that there is a significant difference between the students in the experimental and those in control group in their attitude towards bullying and involvement in bullying. A significant difference implies rejection of null hypothesis. Therefore, null hypothesis that states that there is no significant difference in the attitude to bullying behavior between participants who were exposed to IMT and those were not rejected. The significant difference indicates

that IMT is significantly effective in changing participants' attitudes towards, and involvement in bullying behavior than the traditional counselling strategies been adopted in boarding schools in Zaria.

The study yielded positive results on concern raised by Ettu (2011), Raji et al. (2019), and Saldiraner and Gizir (2021). Raji et al. (2019) showed that bullying victimization is extremely common among school students and that intervention should be provided to protect all students from victimization. Saldiraner and Gizir's (2021) study revealed that to tackle bullying, counselors should identify better intervention technique. Findings of this study support Corey's (2008) assertion that behavior of a person (model) plays a vital role or serves as a stimulus for similar attitudes and behavior on part of onlookers. Similarly, Ettu (2011) found that out of four interventions, IMT appeared to be the most effective technique for modifying involvement of the participants in bullying behavior than other two interventions compared with. Also, Haralambos and Holborn (2008) and Taylor (2006) reported that students frequently learn social attitudes and behaviors by simply observing others, also known as models. A lot of students picked up bullying attitudes and behaviors from seniors who served as non-inhibitory models for bullying others, and they tend to try and emulate them. This was made easier because the seniors' bullying behavior was not punished, but rather praised by their peers, and the bullies were respected by both their peers and the juniors.

This study is also in line with Wang et al.'s (2022) finding that established a need for research on interventions to reduce or diminish bullying in both primary and secondary schools. Findings show that when students were presented with inhibitory models (ex-bullies) in the treatment package, the model seemed to have shifted from admiring and showing respect the bullies to feelings of sympathy and displeasure and misgivings. The use of ex-bullies was very appealing because the students could easily recognize with them. This could have impacted the observed change in attitude and behavior toward bullying among participants. It is not thus exactly a surprise that IMT emerged effective technique than the traditional school counselling. IMT was comparable to "cognitive restructuring technique" used by Badejo and Ubangha (2002) to assist bullies and victims in gaining understanding into their challenges and applying knowledge to resolving related problems.

The findings of this study also confirmed the study of Carbone and Cocodia (2019), Ikeagu (2006), and Jegede et al. (2008). Jegede et al. (2008) used peace education as intervention involving 40 senior secondary school II students. In all of the identified existing deviant behavior in schools, the study found that the control group had a higher presence of deviant behavior than the treatment group. They found Bullying occurred at a rate of 60.87% in the control group versus 39.13% in the treatment group. Hence, peace education, which is more or less similar to IMT was found to be a very effective technique for changing deviant behavior among secondary school students. Ikeagu's (2006) revealed that effective behavior adjustment techniques such as selfcontrol, inhibitory and their combination should be used to address cases of bullying and discouraged the use of punishment in handling bullies. Carbone and Cocodia (2019) research shows that bullying interventions through inhibitory to be more effective than individual counselling with victims and perpetrators of bullying.

From the findings in Table 3 and Table 4, the study revealed no significant difference in the post-test scores in attitudes towards bullying and involvement in bullying due to gender. Both male and female participants appeared to have gotten right attitudes and appropriate involvement perspectives to bullying. This finding gain further support from the work of Aluede's (2011) and Greeff and Grobler's (2008) and on gender attitude towards and involvement in bullying among school students. Greeff and Grobler's (2008) study no significant difference was found between the proportion of boys and girls who have experienced intervention from some form of bullying. Aluede (2011) established that physical and psychological bullying in Nigerian schools is almost evenly distributed between male and female students, and the use of inhibitory intervention stabilized the attitude and involvement in bullying of both gender. However, the finding of this study contradicts the study conducted by Salmivalli and Voeten (2004). Salmivalli and Voeten (2004) reported that anti-bullying attitudes of girls is stronger on average than that of boys, and boys had a higher within-classroom variance than girls even after intervention.

CONCLUSIONS

Based on the results from this research, the experimental group recorded a significant reduction in their mean scores than control group after anti-bullying intervention using IMT. It is concluded that IMT emerged as an effective technique for modifying the attitudes towards, and involvement of secondary school boarding students in bullying behavior, as well as across the gender than the conventional/traditional counselling intervention in boarding schools.

Recommendations

Based on the findings of this study, following recommendations were made:

- 1. IMT should be adopted by school counsellors as an intervention package for counselling students who are heavily involved in bullying.
- School counsellors should strive in complementing the existing anti-bullying counseling interventions through awareness campaigns on the implications of bullying on the victims, bullies, bystanders, school, and the society in general.
- Students who are heavily involved in bullying and/or are considered potential criminals should be made to understand

- that bullying is a bad wind that brings nothing good. This can be accomplished through IMT sessions such as official visits or inviting a willing model or using videotapes among others.
- 4. There is need for research to compare the effectives of IMT with other techniques other than traditional counseling to find out the most effective in curbing bullying behavior among secondary school students.

Author contributions: All authors were involved in concept, design, collection of data, interpretation, writing, and critically revising the article. All authors approved the final version of the article.

Funding: The authors received no financial support for the research and/or authorship of this article.

Ethics declaration: Authors declared that permission letter (no. NOU204028959 dated on 19 August 2022) to conduct the study in the boarding secondary schools in the study area was obtained from the Director, Zaria Educational Zone, Ministry of Education, Kaduna State.

Declaration of interest: Authors declare no competing interest.

Data availability: Data generated or analyzed during this study are available from the authors on request.

REFERENCES

- Allen, K. P. (2010). A bullying intervention system in high school: A two-year school-wide follow-up. *Studies in Educational Evaluation,* 36(3), 83-92. https://doi.org/10.1016/j.stueduc.2011.01.002
- Aluede, O. (2011). Managing bullying problems in Nigerian secondary schools: Some interventions for implementation. *Bangladesh E-Journal of Sociology*, 8(2), 60-68.
- Badejo, A. O., & Ubangha, M. B. (2002). Of bullies and their victims in secondary schools in Lagos, Nigeria: Imperatives for teacher education [Paper presentation]. The 4th International Conference on Teacher Education.
- Bravo-Cedeño, J. A., & Avila-Rosales, F. M. (2022). School bullying and learning in high school students. *International Research Journal of Management, IT & Social Sciences, 9*(4), 631-638. https://doi.org/10.21744/irjmis.v9n4.2130
- Brien, N. O. (2016). To 'snitch' or not to 'snitch'? Using PAR to explore bullying in a private day and boarding school [Doctoral dissertation, Anglia Ruskin University]. https://doi.org/10.13140/RG.2.2. 23076.88967
- Carbone, S., & Cocodia, E. A. (2019). Bullying intervention and solution-focused brief therapy: A review of the literature. *The Asian Institute of Research Education Quarterly Reviews*, 2(2), 386-394. https://doi.org/10.31014/aior.1993.02.02.71
- Chen, H., Guo, H., Chen, H., Cao, X., Liu, J., Chen, X., Tian, Y., Tang, H., Wang, X., & Zhou, J. (2023). Influence of academic stress and school bullying on self-harm behaviors among Chinese middle school students: The mediation effect of depression and anxiety. Frontiers in Public Health. https://doi.org/10.3389/fpubh.2022. 1049051
- Chu, X. W., Fan, C. Y., Lian, S. L., & Zhou, Z. K. (2019). Does bullying victimization really influence adolescents' psychosocial problems? A three-wave longitudinal study in China. *Journal of Affective Disorders*, 246, 603-610. https://doi.org/10.1016/j.jad.2018.12.103
- Corey, G. (2008). Theory and practice of counselling and psychotherapy. Brooks/Cole Publishing Company.

- Egbochukwu, E. O. (2007). Bullying in Nigerian schools: Prevalence study and implications for counselling. *Journal of Social Sciences*, 14(1), 65-71. https://doi.org/10.1080/09718923.2007.11978400
- Ekwelundu, C. A. (2022). Effect of assertiveness training technique on bullying behavior of secondary school students in Anambra State, Nigeria. *European Journal of Social Sciences Studies, 7*(2), 118-131. https://doi.org/10.46827/ejsss.v7i2.1230
- Ettu, T. U. (2011). Assessment and management of bullying behavior among senior secondary school students in Owerri, Nigeria [Doctoral dissertation, University of Lagos].
- Fatah, W. O. A., El-Maksoud, M. M. A., & Elkhalek, H. A. A. (2022). A psychoeducational intervention for teachers about bullying behavior prevention among secondary school students. *Middle East Current Psychiatry*, 1, 1-9. https://doi.org/10.1186/s43045-022-00212-1
- Federal Republic of Nigeria. (2013). *National policy on education*. NERDC Press.
- Fei, L., Liao, M., Ke, L., Zou, Y., Li, X., Chen, Y., & Zhang, R. (2022). School bullying among Chinese third to fifth grade primary school students in a cross- sectional study: The protective effect of psychological resilience. *PLoS ONE, 17*(12), 1-15. https://doi.org/10.1371/journal.pone.0278698
- Francia, G., & Edling, S. (2016). Children's rights and violence: A case analysis at a Swedish boarding school. *Childhood*, 24(1), 1-17. https://doi.org/10.1177/0907568216634063
- Greeff, P., & Grobler, A.A. (2008). Bullying during the intermediate school phase: A South African study. *Childhood, 15*(1), 127-144. https://doi.org/10.1177/0907568207086840
- Haralambos. M., Holborn, M., & Heald, R. (2008). *Sociology: Themes and perspectives*. Harper Collins Publishers.
- Ikeagu, C. N. (2006). Psychological skills for managing bullying behavior as perceived by primary school teachers in Aguata Education Zone. *The Educational Psychologist*, 1(4), 11-14.
- Isma'il, A., Gadzama, M. I. K., & Bako, S. P. (2016). Bat roosts and associated nuisance in public primary and secondary schools in Zaria, Nigeria: A problem worth addressing. *International Journal of Education and Research*, 4(1), 47-56.
- Jegede, S., Ememe, P. I., & Gami, T.O. (2009). A survey of the prevalence of deviant behaviors in secondary schools in Lagos State. *African Journal of Crime and Criminal Justice, 1*(1), 277-300.
- Kilicaslan, F., Beyazgul, B., Kuzan, R., Karadag, D., Koruk, F., & Koruk, I. (2022). The prevalence of peer bullying and psychiatric symptoms among high school students in Southeast Turkey. *Nordic Journal of Psychiatry*, 77(1), 83-90. https://doi.org/10.1080/08039488.2022. 2134450
- Lu, L., Fei, L., Ye, Y., Liao, M., Chang, Y., Chen, Y., Zou, Y., & Li, X. (2022). Psychological resilience may be related to students' responses to victims of school bullying: A cross-sectional study of Chinese grade 3-5 primary school students. *International Journal Environ. Res. Public Health*, 19, 1-12. https://doi.org/10.3390/ijerph 192316121
- Matsani, S. R. (2022). Investigation of bullying in high school students by gender and school type. *Vision International Scientific Journal*, 7(1), 61-82. https://doi.org/10.55843/ivisum2271061rm

- Nguyen, T. H., Nguyen, H. M. T., Ha, T. T., & Nguyen, N. N. (2022). The role of teacher and peer support against bullying among secondary school students in Vietnam. *The Journal of Genetic Psychology*, 183(5), 391-398. https://doi.org/10.1080/00221325. 2022.2099243
- Nugrohoand, S., & Ainyfardhana, N. (2018). Bullying at Islamic Boarding School: A pilot study in Pekanbaru. *International Journal of Pure and Applied Mathematics*, 119(15), 2095-2100. https://doi.org/10.13140/RG.2.2.16266.77768
- Nwankwo, C. A., & Unachukwu, G. O. (2006). Disruptive behavior disorders identified in primary and post-primary schools in Anambra State: Implications for school administration. *The Educational Psychologist*, 2(1), 10-11.
- Obe, M. E. (2009). Bullying treatments. Kidscape.
- Olweus, D., & Limber, S. P. (2010). Bullying in school: Evaluation and dissemination of the olweus bullying prevention program. *American Journal of Orthopsychiatry, 80*(1), 124-134. https://doi.org/10.1111/j.1939-0025.2010.01015.x
- Omoteso, B. A. (2010). Bullying behavior, its associated factors and psychological effects among secondary students in Nigeria. *The Journal of International Social Research*, 3(10), 499-509.
- Ossa, F. C., Jantzer, V., Eppelmann, L., Parzer, P., Resch, F., & Kaess, M. (2021). Effects and moderators of the Olweus bullying prevention program (OBPP) in Germany. *European Child & Adolescent Psychiatry*, 30, 1745-1754. https://doi.org/10.1007/s00787-020-01647-9
- Otta, F. E. (2007). Curbing violent behavior for quality assurance in the upper basic education [Paper presentation]. The 20th Annual Conference of the Curriculum Organisation of Nigeria.
- Pfeiffer, J. P., & Pinquart, M. (2014). Bullying in German boarding schools: A pilot study. *School Psychology International*, *35*(6), 580-591. https://doi.org/10.1177/0143034314525513
- Ponce, R. G., Bayaras, P. I., Blanca, H. Y. A. M., Gutierrez, V. V., Horbino, V. L., Villaruel, J. V., & Billote, W. J. S. M. (2021). Bullying and self-concept among senior high school students. *JPAIR Multidisciplinary Research*, 45, 1-32. https://doi.org/10.7719/jpair. v45i1.764
- Raji, I. A., Sabitu, K., Bashir, S. S., Lawal, B. B., Kaoje, A. U, Raji, M. O. & Usman, A. A. (2019). Prevalence and predictors of bullying victimization among in-school adolescents in Sokoto Metropolis, North-Western Nigeria. *International Journal of Contemporary Medical Research*, 6(9), 11-18. https://doi.org/10.21276/ijcmr.2019. 6.9.25
- Saldiraner, M., & Gizir, S. (2021). School bullying from the perspectives of middle school principals. *International Journal of Progressive Education*, 17(1), 294-313. https://doi.org/10.29329/ijpe.2021.329.
- Salmivalli, C., & Voeten, M. (2004). Connections between attitudes, group norms, and behavior in bullying situations. *International Journal of Behavioral Development, 28*(3), 246-258. https://doi.org/10.1080/01650250344000488
- Salmivalli, C., Kaukiainen, A., & Voeten, M. (2005). Anti-bullying intervention: Implementation and outcome. *British Journal of Educational Psychology*, 75, 465-487. https://doi.org/10.1348/ 000709905X26011

- Saprilia, R. (2022). Identification of school bullying behavior in high grade students of state elementary school 001 Balam Jaya Kampar. *EduGen: Educational Generation Journal*, 1(1), 9-17. https://doi.org/10.56787/edugen.v1i1.6
- Sihidi, I. T., & Amirudin, Z. (2022). Anti-bullying campaign at the Mambaus Sholihin Islamic Boarding School 2 Blitar. *Community Empowerment*, 7(3), 434-441. https://doi.org/10.31603/ce.5788
- Song, Y. P., Han, X., & Zhang, J. W. (2019). Analysis of the situation of school bullying and related factors in junior high school students in China. *Chinese Journal of Preventive Medicine*, *53*(10), 1032-1037.
- Sullivan, K., Cleary, M., & Sullivan, G. (2005). Bullying in secondary schools: What it looks like and how to manage it. Paul Chapman Publishing. https://doi.org/10.4135/9781446215296

- Wang, H., Tang, J., Dill, S.-E., Xiao, J., Boswell, M., Cousineau, C., & Rozelle, S. (2022). Bullying victims in rural primary schools: Prevalence, correlates, and consequences. *International Journal of Environment*, 19(2), 765. https://doi.org/10.3390/ijerph19020765
- Williams, C., Griffin, K. W., Botvin, C. M., Sousa, S., & Botvin, G. J. (2023). Effectiveness of digital health tools to prevent bullying among middle school students. *Adolescents*, *3*, 110-130. https://doi.org/10.3390/adolescents3010009
- Wilson, C., Parry, L., Nettelbeck, T., & Bell, J. (2003). Conflict resolution tactics and bullying: The influence of social learning. *Youth Violence and Juvenile Justice, 1*(1), 64-78. https://doi.org/10.1177/1541204002238364

