

MODERATING EFFECT OF SCHOOL ADJUSTMENT ON ACADEMIC PERFORMANCE AMONG SECONDARY SCHOOL STUDENTS EXPOSED TO COMMUNITY VIOLENCE IN BANDIT PRONE AREAS OF NORTHWEST NIGERIA

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Abstract

This study investigated the moderating effect of school adjustment on academic performance of secondary students exposed to community violence in banditry prone areas of northwestern Nigeria. Three objectives and three null hypotheses guided the study. Ex-post facto research design was adopted for the study. The population of the study consists of 1,571,098 secondary school students distributed across 2,424 public secondary schools in northwestern Nigeria, comprising both male and female students. 384 secondary school students distributed across four states served as the sample size for the study. The sample were selected using multistage sampling technique. Children's Exposure to Community Violence Scale (CECV), and Adjustment Inventory for School Students (AISS) were used to collect data for the study. Findings revealed that Inverse relationship was found between exposure to community violence and academic performance among secondary school students in banditry prone areas of northwestern Nigeria ($\beta = -0.657$, $t = 11.597$, $p = 0.000$); and School adjustment reduces the inverse relationship between exposure to community violence and academic performance among secondary school students in banditry prone areas of northwestern Nigeria ($\beta = 0.190$, $t = 4.596$, $p = 0.000$, $f^2 = 0.068$). It was recommended based on the findings that psychologists should sensitize students, parents and teachers on the moderating roles of school adjustment in order to boost school adjustment and enhance academic performance among the students; Conferences, workshops and seminars should be organized by psychologists school adjustment in order to boost school adjustment and enhance academic performance among students.

Keywords: exposure, community violence, school adjustment, academic achievement.

INTRODUCTION

Academic achievement is a major requirement for students' placement, promotion and awards across all levels of education. Better academic achievement entails academic success which also indicate the likelihood of promotion to an upper level of education. The progress and achievements of students relies upon their achievement in the various subjects offered by the students. In other words, academic achievement is the grades obtained by students from

a standardized test or examination across different school subjects. In Nigerian secondary schools, good academic achievement is vital for entrance to higher schools and universities. Thus, students' academic achievement is perceived as an indicator of their worth, which shapes their future opportunities. In addition, the reputations of secondary schools depend upon the academic achievement of their students, in that, success in the grades obtained by the students indicates the success of that secondary school (Narad & Abdullah, 2016). Secondary schools in Nigeria measures the academic achievement of their students at the end of a lesson, an academic term, as well as an academic year, where the highest scores indicate best performing student. It is paramount at this juncture to note that students used to struggle in displaying their levels of intellects abilities, interests, and skills in the quest for best academic achievement (Lamas, 2015). In this regard, the researchers observes that students in northwestern Nigeria are threatened with kidnapping, witnessing violence, and being victimized through banditry. These activities are likely to interfere with the students' concentration and adjustment in school, which in turn might interfere with the students' academic achievement.

School adjustment is the ability of student to accommodate and adapt to the demands of school environment in order to achieve academic success. The relationship of students to school environment may buttress their concentration, which is the building blocks to attitudes towards adaptation and adjustment to school environment. It is noteworthy that exposure to environmental stressors have been seen to interfere with students' development towards school achievement (Palomar-Lever & Victorio-Estrada, 2017). Secondary school students in northwestern Nigeria may be inadequately prepared for academic activities as well as emotional, social, and educational adjustment. This is likely because the students may be confronted with maladjustment which might not be unconnected to the banditry activities that include killing, kidnapping, displacement, destruction of properties and raping of women happening in Jangebe and Maradun of Zamfara state, Mondo, Afaka and Kasarami of Kaduna State, Kankara and Mahuta of Katsina state, and Birnin-Yauri of Kebbi state, among others (IOM, 2019; Okoli, 2019). Adjustment to school could be traced to organizing of reading materials, seeking academic help, scheduling study time, setting goals, organizing excursions, quizzes and debates, as well as sport competitions, which are likely to yield better understanding and academic achievement. Yet, students in northwestern Nigeria are at risk of avoidance, intrusive memories, and negative changes in thinking and mood, as well as changes in physical and emotional reactions due to the continual attacks and disruption of lives and properties by armed bandits.

Exposure to community violence (ECV) is very likely among secondary school students in northwestern Nigeria due to the frequent use of gun and knives in the random and continual violence taking place in their communities. Such exposure includes witnessing community violence, knowing the victims of community violence, being personally victimized, and sometimes being the perpetrators of the violence. These students are also at risk of bad social learning which may result from witnessing violence from adults and peers in the neighborhood, on the streets, in schools and through media. It is to be noted that young people who witness or experience violence are more likely to perpetrate violence in the future. Therefore, as community violence in northwestern Nigeria is growing, awareness of the activities of the violence are becoming obvious among people in the communities, and that

calls for an urgent investigation to elucidate the correlates of such exposure with other risk factors.

There is an alarming risk of decline in the academic achievement of secondary school students in northwestern Nigeria due to activities of banditry. From personal experience, the researchers observed that a setback in achievement among these students is very likely since most of the students in bandits ridden areas of northwestern Nigeria are either personally victimized, witness people being victimized, or had their loved ones being victimized by the activities of bandits. The armed bandits used to raid towns and villages thereby shooting sporadically, killing people, destroying properties, kidnapping for ransom, and raping young girls and women. Moreover, community violence have been reported to affect school children's cognitive functioning, intelligence, memory, and language or verbal ability (Perfect, Turley, Carlson, Yohanna, & Saint Gilles, 2016). The researchers observed that in northwestern Nigeria, secondary school students are exposed to violence and victimized which put them at risk of intrusive memories of the traumatic event, emotional withdrawal and heightened automatic arousal that may develop months or years after experiencing or witnessing the traumatic event that includes kidnapping, unexpected loss of loved one, and disruption of livelihood.

LITERATURE REVIEW

An investigation of impact of exposure to community violence on students performance was evident in the work of Hardaway et al., (2014) who examined the association between exposure to community violence and academic performance through socioemotional adjustment among low-income adolescents in Pittsburgh. Academic progress of the children was reported by the mothers who progressively completed scales rating their child behaviour. At the age of 14 – 16, children reported their own academic performance and exposure to violence. Their findings revealed that exposure to community violence was indirectly related to academic performance through delinquent behaviour. Whereas, anxious/depressed symptoms do not mediate the relationship between exposure to community violence and academic performance. They concluded that the link between community violence exposure and academic achievement is related to increase in delinquent behaviours after controlling for anxious/depressed symptoms. Anxious/depressed symptoms did not mediate the association between violence exposure and academic performance. Moreover, Schneider (2020) examined the association between childhood exposure to community violence, child maltreatment and school outcome among children of fragile families in the USA. His findings indicated that Internalizing behaviour did not mediate the association between exposure to community violence and academic performance. He concluded that community violence exposure can negatively impact school performance. In another study, Darawshy (2020) conducted a study among Palestinian adolescent of age range 14 – 18 years who are from Israel. He examined the indirect association between exposure to community. His findings revealed that exposure to community violence is associated with lower academic achievement. Finding also confirmed the mediating effect of internalizing and externalizing symptoms in the relationship between exposure to community violence and academic achievement. The researcher concluded that parents that possesses high psychological well-being had children who were more academically successful regardless of their exposure to community violence. Similarly, achievement goals and school adjustment were correlated to academic performance in a study conducted by Adam et al. (2020) among students of Abubakar Tafawa Balewa

University Bauchi, Nigeria. They reported that school adjustment and achievement goals related significantly to academic performance among university students. They concluded that study habits highly influenced academic performance among undergraduate students of Abubakar Tafawa Balewa University, Bauchi. In a similar study, Shah and Sharma (2012) examined social maturity, school adjustment and academic achievement among residential school girls in North India, where they found that there is positive association between social maturity and school adjustment among students. They concluded that there is a bidirectional relationship shared between school performance and school adjustment, while social maturity contributes to school adjustment and academic achievement. Moreover, Ki (2018) investigated the mediating effects of warm and controlling parental behaviours on the relations between the parent-child interaction frequency and children's school adjustment and academic performance. They found that both warm and controlling parental behaviours are predictors of school adjustment and academic performance of South Korean children. They concluded that parenting behaviours serves as mediators on the relations between the parent-child interaction frequency and the child outcomes.

Furthermore, empirical study related to exposure to community violence and school adjustment was carried out by Koposov et al. (2021) which involve a cross-country and gender perspective self-reported survey on community violence exposure and school functioning among youth in Belgium, Russia, and USA. Their findings revealed that students that are exposed to community violence reported an increase in school functioning problems in all the countries and the association was not gender specific. They concluded that regardless of the differences in the level of community violence exposure by country and gender, violence exposure is negatively associated with school functioning across the countries. Additionally, McGill et al. (2014) conducted a study on the effects of exposure to community violence and family violence on school functioning problems among urban youth in USA, while also looking at the potential mediating role of posttraumatic stress symptoms. Their findings revealed a significant association between community violence exposure and negative school functioning. They concluded that poor attitude toward school and teachers as well as heightened sensation seeking are the negative school functioning issues that are associated with community violence exposure among students.

OBJECTIVES

1. To examine direct relationship between exposure to community violence school adjustment, and academic achievement among secondary school students in bandit ridden areas of North-Western Nigeria.
2. To examine direct relationship between exposure to community violence and academic achievement among secondary school students in bandit ridden areas of North-Western Nigeria.
3. To examine the moderating effect of school adjustment in the relationship between exposure to community violence and academic achievement among secondary school students in bandit ridden areas of North-Western Nigeria.

HYPOTHESES

H₀₁: There is no significant relationship between exposure to community violence and school adjustment among secondary school students in banditry prone areas of North-Western Nigeria.

H₀₂: There is no significant relationship between exposure to community violence and academic performance among secondary school students in banditry prone areas of North-Western Nigeria.

H₀₃: School adjustment does not moderate the relationship between exposure to community violence and academic performance among secondary school students in banditry prone areas of North-Western Nigeria.

METHODOLOGY

Design

The study employed *ex post facto* research design, which is often referred to as after-the-fact research design. It is a causal-comparative design whereby the investigation starts after the fact has occurred without interference from the researchers (Silva, 2010). This means that the researchers in the present study did not manipulate the characteristics of the participants, rather, the researchers only investigated the aftermath of the banditry and insurgency that has happened in northwestern Nigeria. Cohen et al. (2018) noted that in *ex post facto* research, the researchers takes the effect (or dependent variable) and examines the data retrospectively to establish causes, relationships or associations, and their meanings.

Population and Sample

The population for this study comprises all public secondary school students in northwestern Nigeria, which stands at 2, 689, 574 secondary school students distributed across 3848 public secondary schools in northwestern Nigeria, comprising both male and female students. In order to determine the sample size for this study, the researcher first considered Research Advisors (2006), who suggested that the recommended sample size for a population of one million (1, 000, 000) and above, a confidence level of 95%, and a margin of error (degree of accuracy) of 5% would be three hundred and eighty-four (384). However, sample size also depends on the statistical technique that will be used in a study (Siddiqui, 2013). The present study involved the use of Structural Equation Modeling (SEM) that require adequate sample size for detection of effect. In determining sample size for Structural Equation Modelling (SEM), Kline (2016) assert that a median sample size for SEM may be about 200 cases based on reviews of studies in different research areas. Therefore, the sample size for this study stand at three hundred and eighty-four (384) secondary school students, based on the recommendation of Research Advisors (2006). This is because the sample size (384) is in line with the recommendation of Kline (2016) who asserted that about 200 cases would be enough for computing SEM.

Instrumentation

The researchers adapted Adjustment Inventory for school students (AISS) developed by Sinha and Singh, (1993) to measure school adjustment. The researchers modified the AISS from question format to statement format. For example, item 1 was modified from “Are you always afraid of something in your school?” to “I am always afraid of something in my school.” Similarly, the researchers also modified the dichotomous (YES or NO) responses to a four-point (4) Likert format (polytomous). As follows; Very True of me (VT), True of me (T), Untrue of me (U), and Very Untrue of me (VU). This modification became necessary because the researchers intended to generate polytomous data that can best be used in fitting structural equation model (Beran & Violato, 2010; Biddle & Marlin, 1987). The researchers established

content validity and the coefficient of reliability of Cronbach's Alpha of .714 for the instrument.

RESULTS

Table 1: Relationship between ECV and School Adjustment obtained using PLS-SEM

Relationship	β	SD	<i>t</i> -value	<i>p</i> -value
ECV → School Adjustment	-0.711	0.022	32.090	0.000

Result from the analysis in table 1 showed that inverse relationship exists between exposure to community violence and school adjustment ($\beta = -0.711$, $t = 32.090$, $p = 0.000$) among secondary school students in banditry prone areas of northwestern Nigeria. This indicated that increase in exposure to community violence results in decrease in school adjustment among the students. Hence, the null hypothesis is hereby rejected. Reason being that the calculated *p*-value, which is 0.000 is less than the alpha-value at 0.05 level of significance ($p < 0.05$).

Table 2: Relationship between ECV and Academic Performance obtained using PLS-SEM

Relationship	β	SD	<i>t</i> -value	<i>p</i> -value
ECV → Academic Performance	-0.657	0.057	11.597	0.000

Inverse relationship was found between exposure to community violence and academic performance ($\beta = -0.657$, $t = 11.597$, $p = 0.000$) among secondary school students in banditry prone areas of northwestern Nigeria. This implies that the exposure to community violence does not go in the same direction with academic performance, that is to say that, as exposure to community violence increases, academic performance decreases among the students. Therefore, the hypothesis is hereby rejected. Reason being that the calculated *p*-value, which is 0.000 is less than the alpha-value at 0.05 level of significance ($p < 0.05$).

Table 3: Moderating Role of School Adjustment

Relationship	β	SD	<i>t</i> -value	<i>p</i> -value	f^2
Sch_Adj x ECV → Academic Performance	0.190	0.041	4.596	0.000***	0.068
ECV → Academic Performance	-0.657	0.057	11.597	0.000***	
Sch_Adj → Academic Performance	0.150	0.049	3.072	0.002*	

Result from table 3 revealed a positive significant moderating role of school adjustment on the inverse relationship between exposure to community violence (ECV) and academic performance ($\beta = 0.190$, $t = 4.596$, $p = 0.000$, $f^2 = 0.068$) among secondary school students in banditry prone areas of northwestern Nigeria. This means that an increase in school adjustment will weaken or dampens the inverse relationship between ECV and academic performance among the students.

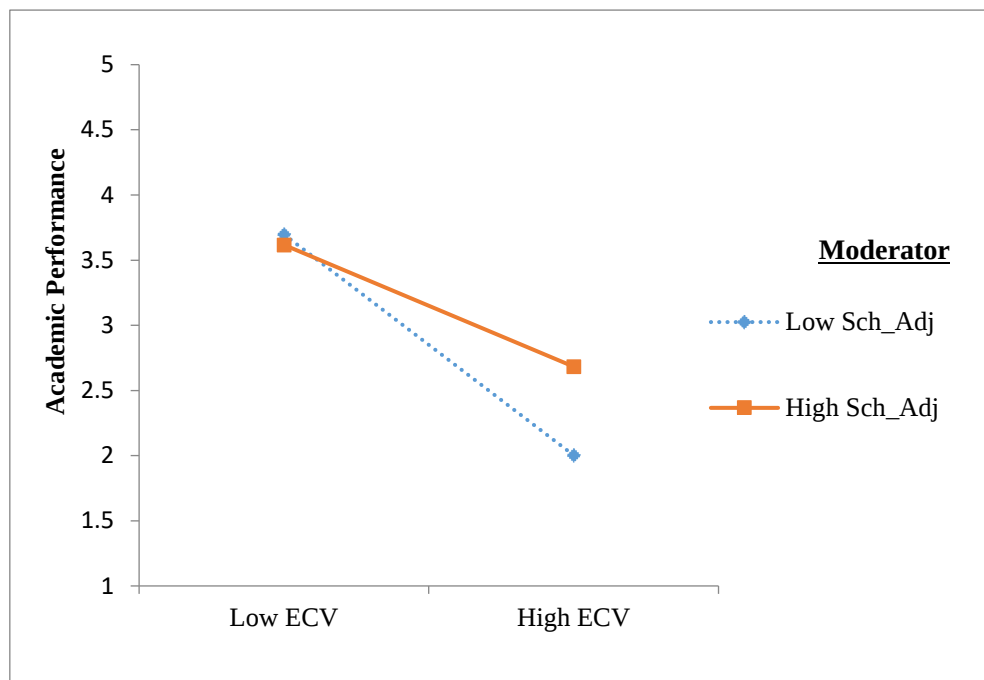


Figure 1: Slope analysis for the moderating role of School Adjustment

The slope in figure 1 showed that the line is less steep for high school adjustment. This indicated that at high (satisfactory proportion of) school adjustment the inverse relationship between ECV and academic performance is dampened or weakened, while at low (unsatisfactory proportion of) school adjustment, the inverse relationship between ECV and academic performance remains unchanged. Furthermore, F-square effect size (f^2) was 0.068, which is an indication that the moderating role contributed significantly in explaining the impact on academic performance. Therefore, the null hypothesis is hereby rejected. Reason being that the calculated p -value, which is 0.000 is less than the alpha-value at 0.05 level of significance ($p < 0.05$).

DISCUSSION

This study confirmed the association of exposure to community violence and academic performance, which was reported as a significant inverse relationship ($\beta = -0.657$, $t = 11.597$, $p = 0.000$), meaning that high rate of exposure to community violence has caused a decline in the academic performance of secondary school students in northwestern Nigeria. This is because when exposure to community violence increases, the academic performance of the students' decreases, due to the inverse association confirmed between the two of them. Furthermore, the assumption about the moderating role of school adjustment on the relationship between exposure to community violence and academic performance was confirmed through hypotheses three, where it was found that school adjustment dampens/weakens the inverse relationship between exposure to community violence and academic performance among secondary school students in northwestern Nigeria ($\beta = 0.190$, $t = 4.596$, $p = 0.000$, $f^2 = 0.068$). This means that a satisfactory proportion of school adjustment is capable of reducing the inverse relationship between exposure to community violence and academic performance.

Hence, the inverse relationship found between exposure to community violence and academic performance has consequently affected the grades of the students. In support of this finding,

Nnamani et al. (2014) has explained that academic performance scores measured at the end of a lesson, an academic term, a semester or an academic program were used to determine best performing students through the highest scores. In addition, Joe et al. (2014) further noted that fair, poor, good, excellent, A1, C4, and F9 are the terminologies that are used to interpret the performance of students. Hence, every student and their parent or caregivers are aspiring to earn the highest scores, But the high rate of exposure to community violence has been found to weaken the academic performance of the students. Additionally, the reputation of the secondary schools is also affected by the falling grades of students. This is because Narad and Abdullah (2016) explained that the success of an academic institution depends on the academic performance of students, whereby excellent students' performance increases the reputations of the institution. Moreover, the findings from this study are in line with the claim made by Perfect et al. (2016), that low IQ scores was found among students that experienced and or witnessed violence, compared to the students who did not witness or experienced any violence.

Furthermore, school adjustment has been described as a structure that models students' entire behaviour towards achievement and successes in school and beyond (Chandel, Lakhani, & Jain, 2017). In the same vein, findings from this study revealed that exposure to community violence has inverse association with school adjustment, which means that high level of exposure demoralizes the adjustment of students. Additionally, another finding from this study revealed that school adjustment moderates (diminishes/weakens) the inverse relationship between exposure to community violence and academic performance. This finding is in agreement with Reich and Flanagan (2010) who posits that school adjustment is the necessary adaptation that is required to maintain educational fit balance between students' unique characteristics and the definite nature and requirements of school environment.

CONCLUSION

Based on the findings from this study, it is concluded that school adjustment dampens/weakens the inverse relationship between exposure to community violence and academic performance among the students. Therefore, the research problem that necessitated the conduct of this study has been resolved, since the findings revealed the risk of exposure to community violence and its negative consequence on academic performance of secondary school students in northwestern Nigeria.

RECOMMENDATION

Based on the findings from the study, the following recommendations were made;

1. Psychologist should sensitize students, teachers, and parents on the moderating role of school adjustment in order to boost adjustment among students and enhance their academic performance.
2. Conferences workshops and seminars should be organized by psychologists on school adjustment in order to boost adjustment among students and enhance their academic performance.
3. School psychologists and counsellors should offer counselling services and psychotherapy to exposed students with poor school adjustment.

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