



Family Environment and Peer Influence as predictors of Aggressive Behaviour among Public Senior Secondary School students in Rivers State

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Abstract

This study investigated family environment and peer influence as predictors of aggressive behaviour among public senior secondary school students in Rivers State. To achieve the objectives of the study 2 research questions and 2 null hypotheses guided the study. correlational research design was adopted for the study. The population involved 199, 602 public senior secondary school students in Rivers State. Krejcie and Morgan's formula (1970) for determination of suitable sample size was used to arrive at a sample size of 383 respondents. Two instruments the Buss-perry Aggressive Questionnaire (BPAQ) a standardized instrument and the family environment and peer influence Questionnaire (FEPIQ) researchers constructed instrument were used for data collection. The Psychometric properties of the PEPIQ was well determined by experts resulting to a reliability index of 0.81. The face-to-face method was employed to administer the instruments and data was analyzed using simple regression analysis for the research questions and simple regression analysis related to ANOVA for the hypotheses at 0.05 level of significance. The result of the study revealed that family environment and peer influence predicted aggressive behaviour significantly. It was recommended that family-based intervention programmes should be carried out regularly like Parental workshops and conflict resolution training could reduce aggression if implemented from time-to-time. Peer mentorship programmes should be encouraged in schools like Positive peer modeling, this can counteract negative influences.

Keywords: Aggressive Behaviour, Family Environment, Peer Influence, Public Senior Secondary School, Students.

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INTRODUCTION

Secondary school adolescent aggression has recently captured so much attention from researchers, policymakers, and educators due to the far-reaching implications it has on school climate, academic achievement, and social development. Aggression is defined as behaviour with the intent to hurt or disturb others aggression exists in a number of forms, such as physical aggression, verbal aggression, and indirect aggression, such as relational or social exclusion (Anderson & Bushman, 2012). This definition suggests that aggression can present itself in all the forms like physical, verbal and relational aggression. Older secondary school teenagers are in a life stage where they are experiencing significant emotional, cognitive, and social growth, which can sometimes manifest as aggressive behaviour, especially under unfavorable family environment and peer influence.

Family environment like Parenting style and peer pressure, are key predictors of aggression. For example, authoritarian child-rearing habits are associated with greater aggression in children, while permissive child rearing can overlook setting appropriate behavioural boundaries (Baumrind, 1991). Peer pressure, which is also a powerful force, can either reinforce or diminish aggressive behaviour depending on peer relationship characteristics (Espelage, Basile et al., 2018).

Parenting plays a crucial role in the formation of aggression. Parenting styles, such as authoritarian or neglect, have been linked with more aggressive conduct (Baumrind, 1991). Scientific studies determine that exposure to domestic violence normalizes aggression, considering that children learn such behaviours (Bandura, 1977). Peer relationships are especially powerful in aggression, especially in the adolescent stage. Peer rejection is often accompanied by feelings of isolation and resentment, which can manifest as aggression (Coie et al., 1995). Aggressive peer affiliation, in contrast, legitimates and confirms such actions (Dishion et al., 1999). Social learning theory explains this by referring to peer modeling in behaviour acquisition (Bandura, 1977).

Research evidence supporting family environment and peer influence as correlates of aggressive behaviour is as follows, Espelage et al. (2018) illustrated that bullying behaviour is strongly mediated by peer group norms, highlighting the role played by social reinforcement in aggression.

Secondary schools in Rivers State are experiencing increased cases of aggression among their students, which manifest in physical fights, bullying, and verbal confrontations. The trend has been keeping educators, parents, and policymakers concerned about the causes and what to do (Kennedy & Nicholas, 2019). While current studies like Longe and Adeyeye (2019), Osasona et al. (2020) have investigated aggression among Nigerian adolescents, but few of them specifically looked into family environment and peer influence as predictors of aggressive behaviour in Rivers State. The predictors need to be identified to come up with interventions that target the causative factors of aggression and provide a safe and conducive environment for learning.

The study is anchored on Bandura's (1977) social learning theory. Social learning theory states that aggression is learned, observed, imitated, and reinforced in social settings. Adolescents are likely to copy aggressive behaviours encountered in their homes and peer settings. Some empirical studies support how family environment predicts aggressive behaviour. Henneberger et al. (2014) conducted a study on Family functioning, parental monitoring and adolescent physical aggression in a longitudinal study of middle-school youth found that lower

family cohesion and poorer parental monitoring predicted higher levels of physical aggression over time, with some effects varying by ethnicity. In the same vein, Taylor, Davies and Windle (2014), conducted a trajectories of adolescent aggression and family cohesion using longitudinal data, this study showed that trajectories of adolescent aggression were negatively associated with family cohesion; adolescents in less cohesive families followed higher aggression trajectories.

Andreas et al. (2009) carried out a study to determine the moderating effects of family environment on the association between children's aggressive beliefs and their aggression trajectories from childhood to adolescence. This empirical study found that a positive family environment (support, low conflict) buffered children with aggressive beliefs from developing higher aggressive behaviour, indicating a moderating role of family environment. On peer influence, Farrell et al. (2017) investigated the Dimensions of peer influence and adolescent problem behaviour in a large urban sample, specific domains of peer influence (peer pressure, modeling, rewards for deviance) results revealed that these specific domains were differentially associated with adolescents' problem behaviours including aggression, with peer modeling and rewards for deviance showing especially strong relations. In the same vein, Laninga-Wijnen et al. (2017) conducted a study on Popular peers' norms moderate friendship and socialization for aggression. This empirical study found that norms set by popular peers moderate friendship selection and socialization for aggression, when popular peers endorse aggression, adolescents are more likely to both select aggressive friends and become more aggressive. Again et al. (2018), investigated aggressive peer behaviour and adolescent maladjustment in a cross-sectional study using large student sample, this empirical study reported that association with aggressive peers was linked to greater personal, school, and family maladjustment and higher individual aggressive behaviour, supporting peer influence pathways to aggression.

Despite the growing body of research on predictors of aggressive adolescent behaviour, few studies have been carried out on the specific predictors of aggressive behaviour among Rivers State public senior secondary school students. This study aims to bridge this gap in a study to test these family environment and peer influence as predictors to determine if they predict aggressive behaviour among Rivers State public senior secondary school students. As aggressive conduct has a critical bearing on school performance and social development, it is important to find these predictors of aggression behaviour among Rivers State senior secondary school students. Such knowledge will benefit teachers, counsellors, and policymakers with viable information for developing evidence-based programmes to reduce aggression and enhance youth positive development. Against this background, this study was formulated.

Statement of the Problem

Aggressive behaviour of public senior secondary school students has been a pressing problem in Nigeria, particularly in Rivers State, and it has implications for the students, educators, and the general public. Despite the need to address the problem, relatively little research has been done to examine the specific predictors of aggressive behaviour among senior secondary school students in Rivers State. This study will close this gap by investigating family environment and peer influence as predictors of aggressive behaviour among Rivers State senior secondary school students. The increasing prevalence of aggressive behavior among Rivers State senior secondary school students poses a significant threat to the academic, social, and emotional well-being of students and the wider school community. Physical fights, bullying, and word wars are being reported more and more, disrupting class settings and inspiring terror within both educators and

pupils. Despite many interventions, that they persist shows that underlying reasons, in particular the role of family environment and peer influence, are still not being treated effectively.

The lack of focused information cripples the ability to develop effective prevention and intervention programmes, and schools must suffer from unchecked aggression. This study seeks to fill the gap by exploring family environment and peer influence as predictors of aggression among senior secondary school students in Rivers State. In finding these predictors, the study seeks to provide evidence-based suggestions to guide interventions in creating a safer, more supportive learning environment.

Purpose of the Study

The purpose of this study explored Family environment and Peer influence as predictors of aggressive behaviour among senior secondary school students in Rivers State. Specifically, the study aims to:

- Examine family environment as a predictor of aggressive behaviour among public senior secondary school students in Rivers State.
- Investigate peer influence as a predictor of aggressive behaviour among public senior secondary school students in Rivers State.

Research Questions

The following research questions guided the study to achieve its objectives:

- What relationship exists between family environment and aggressive behaviour among public senior secondary school students in Rivers State?
- What relationship exists between peers influence and aggressive behaviour among public senior secondary school students in Rivers State?

Hypotheses

The following hypotheses were generated to give bearing to the study and were tested at 0.05 level of significance:

- Family environment does not significantly predict aggressive behaviour among public senior secondary school students in Rivers State.
- Peer influence does not significantly predict aggressive behaviour among senior secondary school students in Rivers State.

METHODOLOGY

The correlational research design was used in the study. Kplolovie (2021) says that correlational research is undertaken for analysis of the size and direction or type (positive or negative) of relationship that exists between a dependent variable (criterion variable) and one or more independent variables (predictor variables). It is not all situations in real life that provide room for the stringently controlled manipulation of variables as demanded by experimental research.

The researchers are convinced that the most suitable design for the study is the correlational research.

The target population of the study consists of all the SS1 to SS3 senior secondary school students in Rivers State for the 2024/2025 academic session in all senior public secondary schools in Rivers State. There are 339 senior public secondary schools with a total population of 199, 602 students (source: Rivers State Senior Secondary School Management Board). The breakdown is 60,934 SS1 students, 66,155 SS2 students, and 72,513 SS3 students. The reason for utilizing senior secondary school students is that they are old enough to read and understand the items on the research instruments since they have learned a lot in English language, aside from the fact that aggressive behaviour in secondary schools is more manifested among the senior students compared to the junior students.

The minimum sample size for the population of this study is 383 using the Krejcie and Morgan's formula (1970) for determination of minimum sample size. The sample was selected using a simple random sampling procedure.

There were two instruments used in gathering data for the study. The first instrument is a standardized instrument developed by Buss- Perry (1992) known as Buss-Perry Aggression Questionnaire, (BPAQ). It was used in the study. It is described as a widely used self-report measure that was developed to assess four facets of aggression namely:

- Physical aggression, the tendency to harm others physically.
- Verbal Aggression, the tendency to express aggression through words (arguments or insults).
- Anger, emotional aspects of aggression such as frustration and irritation
- Hostility, cognitive aspects of aggression, such as cynicism and mistrust.

The inventory comprises 29 items measured on a 5point Likert scale as follows: 1 = Extremely Uncharacteristic of Me (EUOM) 2= Somewhat Uncharacteristic of Me (SUCM), 3 = Neither Characteristic or Uncharacteristic of Me (NCUM), 4=Somewhat Characteristic of Me (SCOM), 5 = Extremely Characteristic of Me (ECOM)

The respondent completes the 1-5 items by summing the responses for the items in the subscale. The respondent's total aggressive score is the sum of the scores on the 29 items. The higher scores indicate greater aggression on the respective dimension. There are no absolute cutoff scores, but the scores are interpreted against the backdrop of normative data for a specific population. The experts conceptualize the strength of BPAQ as a complex assessment of aggression, which is physical, verbal, emotional and cognitive. Easy to score and administer with satisfactory psychometric properties (validity and reliability established).

The second instrument is constructed by the researchers and named family environment and peer influence questionnaire (FEPIQ). The instrument has two parts, the first part collects personal information like the name of the school, family type and peer inclination. Part two consists of 16 self-report items on family environment and peer influence. The instrument is quantified on the 5 point Likert scale between 1 -5. This was responded to on a five point range of Completely Agree (CA=5), Mostly Agree (MA=4), Undecided (UD=3), Disagree (=2), and Completely Disagree (CD=1). Simple terms or words for the respondents' easy understanding of the items were utilized.

The validity and reliability of Buss-Perry Aggression Questionnaire was ensured by the constructor of the instrument while the validity of the Family environment and Peer influence

Questionnaire (FEPIQ) was ensured through the face and content validity by experts in measurement and evaluation and guidance and counselling. The reliability was ensured through the internal consistency method using Cronbach Alpha statistical method and it yielded a coefficient level of 0.81, which was adjudged to be high by experts. The instrument was administered face-to-face to the respondents in their respective schools. Data obtained was subjected to simple linear regression analysis for the research questions while the hypotheses were subjected to simple regression analysis related to ANOVA at 0.05 level of significance using SPSS package.

RESULTS

Research Question 1: What is the extent to which family environment predict aggressive behaviour among senior secondary school students in River State.

Table 1: Simple regression analysis summary on the extent to which family environment predict aggressive behaviour

Model Summary ^b									
Model	R	R Square	Adjusted R square	Std. error of the Estimate	R square change	F Change	df1	df2	Sig. F Change
1	0.351	0.123	0.121	0.627	.123	53.94	1	381	.000

Result Significant at 0.05 level of significance

Table 1 shows the model summary revealing the coefficient of determination $R = 0.351$, $R^2 = 0.123$, $P = .000$. This showed the proportion of variance in aggressive behaviour of public senior secondary school that is explained by family environment. This implies that 12.3% of the variance in aggressive behaviour was accounted for or explained by family environment alone. The positive regression coefficient indicates that students from dysfunctional or conflict-prone family environments are more likely to exhibit aggressive behaviour. The result is statistically significant: The p-value is less than 0.05, meaning the effect is not due to chance. The answer to research question one therefore is: Family environment is a strong and significant predictor of aggressive behavior to a high extent.

Research question 2: What is the extent to which peer influence predict aggressive behavior among senior secondary school students in River State.

Table 2: Simple regression analysis summary on the extent to which peer influence predict aggressive behaviour

Model Summary ^b									
Model	R	R Square	Adjusted R square	Std. error of the Estimate	R square change	F Change	df1	df2	Sig. F Change
1	0.234	0.055	0.052	0.652	.055	22.44	1	381	.000

Result Significant at 0.05 level of significance

Table 2 shows the model summary revealing the coefficient of determination $R = 0.235$, $R^2 = 0.055$, Adjusted R square = 0.052, $p = 0.000$. From the R^2 value it is observed that peer influence relates to about 5.5 with aggressive behaviour among public senior secondary school students. This implies that Peer influence accounts for 5.5% of the variance in aggressive behavior. A positive relationship was found, showing that students who associate with aggressive or antisocial peers tend to be more aggressive themselves. The regression model which indicates that result is statistically significant, confirming peer influence as a contributing factor to aggressive behaviour. The answer to research question 2 therefore is: Peer influence is a moderate but significant predictor of aggression.

Hypotheses Testing

Hypothesis 1: Family environment does not significantly predict aggressive behavior among senior secondary school students

Table 3: Simple regression analysis related to ANOVA on the extent to which family environment predict aggressive behaviour

ANOVA ^a					
Model	Sum of squares	Df	Mean square	F	Sig
Regression	21.21	1	21.21	53.94	.000
Residual	149.72	381	0.393		
Total	170.93	382			

a. Dependent Variable: Family Environment
b. Predictors: (Constant), aggressive behavior

Result strongly significant at 0.05 level of significance

Table 3 shows F-statistic (53.94, $p < .001$) which indicates that the model is statistically significant. Effect Size: $R^2 = 0.124 \rightarrow$ Aggressive behavior explains 12.4% of variance in family environment. Which implies that higher aggression is associated with poorer family environments ($\beta = +0.352$). Based on the above analysis the null hypothesis which states that family environment does not significantly influence aggressive behaviour is rejected and the alternate hypothesis accepted, which means family environment predicts aggressive behaviour

Hypothesis 2: Peer influence does not significantly predict aggressive behavior among senior secondary school students in rivers state.

Table 4: simple regression analysis related to ANOVA on the extent to which peer influence predict aggressive behaviour

ANOVA ^a					
Model	Sum of squares	Df	Mean square	F	Sig
Regression	9.53	1	9.53	22.44	.000
Residual	161.83	381	0.425		
Total	171.36	382			

a. Dependent Variable: Peer influence
b. Predictors: (Constant), aggressive behavior

Result moderately significant at 0.05 level of significance

Table 4: shows Significant Model: $F(1,381) = 22.44$, $p < .001$, Effect Size: $R^2 = 0.056 \rightarrow$ Aggression explains 5.6% of peer influence variance. This result clearly shows Positive relationship ($\beta = +0.236$) which suggests that aggressive individuals associate with similar peers. Based on the above result we reject the hypothesis which states that peer influence does not significantly predict aggressive behaviour among public senior secondary school student in Rivers State, on that basis, the alternate hypothesis is accepted which means peer influence predict aggressive behaviour.

DISCUSSION OF FINDINGS

The study examined family environment and peer influence as predictors of aggressive behaviour among senior secondary school students in Rivers State, Nigeria. The findings provide a reflective explanation as to the relative importance of each factor, informed by empirical literature. A step-by-step lucid discussion of the findings is provided as follows; The findings of this study revealed that family environment accounted for 12.3% of the variance in aggressive behaviour among senior secondary school students in Rivers State ($F = 53.94$, $p < .05$). This indicates that the quality of family environment, such as cohesion, monitoring, conflict management, and emotional support, plays a strong and statistically significant role in shaping adolescents' aggressive tendencies.

The result aligns with the work of Henneberger et al. (2014), who found that poor family cohesion and weak parental monitoring predicted higher levels of physical aggression over time. Similarly, Taylor et al. (2014) reported that adolescents from less cohesive families followed higher aggression trajectories across developmental periods. Furthermore, Andreas et al. (2009) emphasized that supportive family environments could buffer the influence of aggressive beliefs on the development of aggressive behaviours. Thus, consistent with prior evidence, the present result suggests that in Rivers State, family environments characterized by poor monitoring, conflict, or lack of cohesion significantly predispose students to aggressive behaviour.

On the other hand, the second finding found on table 2 which answered research question 2 and table 4 which tested the corresponding hypothesis 2 revealed that peer influence accounted for 5.5% of the variance in aggressive behaviour ($F = 22.44$, $p < .05$). While this effect is moderately significant, it is comparatively smaller than the effect of family environment. This finding is consistent with the results of Farrell et al. (2017), who demonstrated that peer domains such as peer modeling and deviant rewards predicted problem behaviours, including aggression. Likewise, Laninga-Wijnen et al. (2017) observed that popular peers' aggressive norms facilitated both the selection of aggressive friends and the escalation of aggression over time. Jiménez et al. (2018) also confirmed that adolescents associated with aggressive peers displayed higher maladjustment and aggressive behaviours. Taken together, these studies support the conclusion that while peers influence adolescent aggression, the family environment exerts a stronger predictive effect in the current context.

The comparative strength of the family environment (12.3%) over peer influence (5.5%) in predicting aggression among senior secondary students in Rivers State has practical implications. It suggests that interventions to reduce aggression should begin at the family level, focusing on parental monitoring, emotional support, and conflict resolution skills, while also addressing peer group dynamics through school-based peer mentoring, pro-social peer influence, and anti-bullying campaigns. In conclusion, one can say that, while peer influence is a good predictor of aggression, its strength can vary by culture, form of aggression, and social

environment. The findings of this study are robust for physical aggression among Nigerian adolescents but could, in subsequent studies, compare urban and rural peer relationships.

CONCLUSION

Based on the outcome of this study the researchers concluded that family environment was found to have strong predictive value of aggressive behaviour with statistical evidences beyond reasonable doubts when put into simple regression analysis against ANOVA. Family environment was the strongest predictor of aggressive behaviour, and peer influence too was found to have predictive value on aggressive behaviour though moderate, this too was found established statistically.

Recommendations

The following recommendations are proffered:

- Family-Based Intervention Programmes should be carried out regularly like Parental workshops and conflict resolution training can reduce aggression if implemented from time-to-time.
- Peer Mentorship programmes should be encouraged in schools like Positive peer modeling, this can counteract negative influences.

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