

Broken Home as a Predictor of Aggressive behaviour Among Mathematics Students in Senior Secondary Schools of Katsina Local Government, Katsina State.

Sabo, Abubakar.

abusabokguga@gmail.com, (08039498636)

Department of Science Education, Faculty of Education, Federal University Dutsin-Ma, Katsina State, Nigeria

Abdurrahaman, Yusuf.

ayusuf96@gmail.com

Department of Mathematics Education Isa Kaita College of Education DutsinMa.

Ahmed,Sade.

FCE (Technical) Gombe, Department of Mathematics, School of science

Abstract

This study examined the relationship between broken home and aggressive behaviour among Mathematics students in senior secondary schools of Katsina metropolis Katsina State Nigeria. four secondary schools were randomly selected from the total number of senior secondary schools in the metropolitan. A sample of 346 students participated in the study. Two research instruments were used to collect data. The study found that exposure to broken home may contribute to students' physical aggressive behaviour, verbal aggressive behaviour, anger and hostility. The researchers suggested that, Counsellors and psychologists' services should be effectively deployed in schools to help students with broken home exposure through treatment packages understand ways they can develop resilience in spite their experiences.

Key Words: Broken Home, Aggressive behaviour,

Introduction

The home or the family out of which the students come is a profound, important factor to consider in the process of education of a child. Family is the first of human being institution. It is society's basic unit. Family is a set of individuals related by marriage or by blood or through adoption. Family therefore, constitute a complex bond, interacting and communicating with each other in their respective social roles, a husband and wife or mother and father, son and daughter, brother, sister, cousin, aunts, uncles, nephews, niece. Gilliland(2022) pointed out that the family lays the psychological, moral and spiritual basis in the overall development of the adolescent. Every individual comes from a home and the home is regard as the initial place of every person. The home as a factor plays role in every child's academic life, negatively or positively. Tinuola(2021) is of the view that a family is a group of people connected by blood, marriage or adoption who shares the primary responsibility for reproduction and caring to members of society. Ronald and Ronald (2019) asserted that marriage can end through permanent separation, annulment, desertion, death or divorce. Most marital dissolution today comes through death

or divorce, with somewhat more marriages ending through divorce than through death. According to Asare and Kwafao (2017), the term family is defined in different ways because there are different types of families. Most definitions of aggression share two common features: the behavior is intended to harm and the behavior is perceived as hurtful by the victim. Children can be extraordinarily mean to one another. Mean behaviors can take a variety of forms: physical aggression, verbal insults, relationship manipulation, and nonverbal expression of disdain or contempt (Jhangiani, & Tarry, 2021). Student's aggressive behaviour some time results into acts which poses threat or harm to others and even themselves.

Aggressive behavior refers to a cluster of behavior which includes: physical aggressive behavior, verbal aggressive behavior, anger and hostility(Haruna, 2015). It is a form of behavior along with the intentions may be expressed directly or indirectly and this could hurt another. These direct or indirect forms of aggressive behavior are expressed physically, verbally, as anger or through hostile means. It is also a universal social issue which individuals particularly students commit against self or other people. It is an identified problem which is fast spreading across secondary schools in Nigeria causing individual and societal damage, turning out an issue for concern to parents, teachers, school administrators and the society in general. Verbal aggressive behaviour also includes: calling names, nick names and spreading rumours. It involves being blunt at telling friends one disagree with openly, being very argumentative and verbally expressing ones displeasure at anyone who annoys. Progovac and Benitez-Burraco (2019) express verbal aggressive behaviour to involve the use of words to harm another person, with example of verbal aggressive behaviour include behaviours of making threat or writing threatening notes or letters, calling names, spreading gossip and teasing.

Anger as a component of aggressive behaviour include being hot-tempered, show of irritation when feeling frustrated, getting angry for no reason and a feel to cause chaos. It is a form of emotional aggression in which harm is inflicted for its own sake, it is often impulsive and is carried out at the heat of the moment (Jhangiani, & Tarry, 2021). Hostility include being sometimes eaten up with jealousy, feeling so bitter about things, being sometimes suspicious about overly friendly strangers, being insensitive to the feeling of others and showing little or no shame after been caught doing something wrong. A hostile person is someone that usually does negative evaluations of and towards others, showing an overall dislike and contempt for others (Spielberger, 2015).

The prevalence of aggressive behaviour among science secondary students in Nigeria has been accounted for in recent times. Alued and Fajoju(2020) found that four in every five secondary school participant 78% reported being bullied and 85% of the respondent admitted bullying others at least once. In a similar study by Aluede and Fajoju (2020), 62.4% of the respondents have been victims of bullying, while 29.6% indicated that they have bullied others. Research conducted by Omoteso, (2010) showed that the prevalence of aggression among students was 87.2%. Thus 88.1% has been bullied while 33.1% were bullies.

Furthermore, in a national survey of crime and safety in Nigeria by Clean Foundation, (2022) and Igbo and Chinwokwu (2020). It was discovered that aggressive behaviour is on the increase in Nigeria as physical assault increase by 19% from 2011 to 2012, Broke home increased from 17% in 2010 to 31% in 2012. Some-reports also point to high rates of hostile aggressive behaviour. According to a 2017 study conducted by Centre for Disease Control and Prevention, 33.5% students have been involved in physical fights in the past year. Similar prevalence rate observed in other developed countries.

Objectives of the Study

The aim of this study is to investigate the relationship between attitude in broken home and students' aggressive behaviour among Mathematics students in senior secondary schools in Katsina metropolis. The study specifically finds out the:

1. Relationship among Physical aggressive behaviour, verbal aggressive behaviour, anger, hostility and attitude in broken home.
2. relative influence of attitude in broken home on physical aggressive behaviour
3. Relative influence of attitude in broken home on verbal aggressive behaviour.

Research Questions

The following research questions were addressed in this study;

1. What is the relationship among Physical aggressive behaviour, verbal aggressive behaviour, anger, hostility and broken home?
2. What is the relative influence of attitude in broken home on physical aggressive behaviour?
3. What is the relative influence of attitude in broken home on verbal aggressive behaviour?

Research Hypotheses

The following null hypotheses were tested at 0.05 level of significance

1. There is no significant relationship among Physical aggressive behaviour, verbal aggressive behaviour, anger, hostility and broken home.
2. There is no significant relative influence of attitude in broken home on physical aggressive behaviour.
3. There is no significant relative influence of attitude in broken home on verbal aggressive behaviour.

Method

Research Design

This research design used for this study was correlational design. Correlational design refers to studies in which the purpose is to discover relationship on which predictions are based between variables through the use of correlational statistics

Target Population and Sample

The population of this study are all Mathematics students in senior secondary schools in Katsina metropolis, Katsina State. There is a total of twelve senior secondary school in katsina metropolis with a total population of 34977 students were 19196 are males and 15781 are females.

Arandom sampling was adopted in selecting four schools in the population, out of which a sample size of 346 was selected, the sample is sufficient in capturing the desired responses (Krejcie, & Morgan,

1970). This sample was drawn from the entire population of senior secondary Mathematics students the from 12 schools.

Purposive sampling technique was used in selecting the sample of schools to be used for the study. However, the research sampling for each participant's from the schools was done using simple random sampling and proportionately for a fair representation across schools selected.

Instrumentation

Two questionnaires were designed and used to collect data. They are:

- i. Buss-Perry Aggression Questionnaire (BPAQ).
- ii. Attitude in Broken Home Questionnaire (ABHQ)

BPAQ and ABHQ are four-point Likert-scale type. Students were asked to indicate their opinion by ticking any of 'Strongly Agree', 'Agree', 'Disagree', and 'Strongly Disagree' in front of each statement. The BPAQ and ABHQ have 20 and 10 items respectively. The initial versions instruments were given to experts for suggestions and comments before coming up with the final versions. The Cronbach alpha reliability co-efficients of 0.72 and 0.77 were obtained for BPAQ and ABHQ respectively.

Examples of items on BPAQ:

I have threatened people.

I tell my friends openly when I disagree with them.

Given enough provocation, I may hit another person

Examples of items on ABHQ:

Your father hurts your mothers felling by calling her name, yelling or screaming at her.

Your parent's separation affects your school fees.

I am not doing my homework due to the separation of parent.

Data Analysis

Data were analyzed using SPSS Version 16. The demographic characteristics of the respondents were described in frequencies and percentages. The research question one to six was answered using mean and standard deviation, while hypothesis one to three were analyzed and tested using Pearson Product Moment Correlation (PPMC) statistical tool. Pearson Product Moment Correlation statistical tool is preferred because it measures the degree of relationship between linearly related variable.

Research Question 1 and Hypothesis 1

What is the relationship among Physical aggressive behaviour, verbal aggressive behaviour, anger and broken home

Table 1: Correlation Matrix of Physical Aggressive Behaviour, Verbal Aggressive Behaviour, Anger, Hostility and Broken Home

		Physical Aggressive	Verbal Aggressive	Anger	Hostility	Attitude in Broken Home
Physical Aggressive	Pearson Correlation	1	.551**	.513**	.618**	.814**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	371	357	348	359	355
Verbal Aggressive	Pearson Correlation	.551**	1	.525**	.526**	.634**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	357	361	338	350	343
Anger	Pearson Correlation	.513**	.525**	1	.552**	.788**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	348	338	350	339	346
Hostility	Pearson Correlation	.618**	.526**	.552**	1	.658**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	359	350	339	362	344
Attitude in Broken Home	Pearson Correlation	.814**	.634**	.788**	.658**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	355	343	346	344	355

Table 1 shows the correlation among the predictor variables (Physical Aggressive Behaviour, Verbal Aggressive Behaviour, Anger and Hostility) and the constant (Broken home). There is a very high positive relationship between physical aggressive behaviour and attitude in broken home. The relationship is also significant ($r = .814$; $p < 0.05$). There is a high positive relationship between verbal aggressive behaviour and attitude in broken home. The relationship is not just positive but also significant ($r = .634$; $p < 0.05$). Also, there is a very high positive significant relationship between anger and broken attitude in home ($r = .788$; $p < 0.05$). Lastly, there is a high positive significant relationship between hostility and attitude in broken home ($r = .658$; $p < 0.05$). This means that, as attitude in broken home increase, all the types of aggressive behaviour also increase. Therefore, there is a high degree of relationship between aggressive behaviour and attitude in broken home. The null hypothesis which states that, there is no significant relationship among the independent and the dependent variable is hereby rejected.

Research Question 2 and hypothesis 2

What is the relative influence of attitude in broken home on physical aggressive behaviour?

Table 2: Relative Influence of Attitude in Broken Home on Physical Aggressive Behaviour

$$R = .814$$

$$RSquare = .663$$

$$Adjusted R Square = .662$$

$$Std. Error of the Estimate = 1.50778$$

Model	Sum of Squares	Df	Mean Square	F	Sig.	Remark
Regression	1581.042	1	1581.042	695.455	.000	Sig.

Residual	802.508	353	2.273
Total	2383.549	354	

Sig = significance

In table 4.2 above, attitude in broken home accounted for 66.3% of the total variance of physical aggressive behaviour (R square = .663; $F_{1, 354} = 695.455$; $p < 0.05$). This means that, attitude displayed in broken homes leads to physical aggressive behaviours of the subjects researched. Thus, the null hypothesis which states that, there is no significant relative influence of attitude in broken home on physical aggressive behaviour is rejected.

Research Question 3 and hypothesis 3

What is the relative influence of attitude in broken home on verbal aggressive behaviour?

Table 3: Relative Influence of Attitude in Broken Home on Verbal Aggressive Behaviour

R = .634

RSquare = .402

Adjusted R Square = .400

Std. Error of the Estimate = 1.89218

Model	Sum of Squares	Df	Mean Square	F	Sig.	Remark
Regression	819.126	1	819.126	228.783	.000	Sig.
Residual	1220.903	341	3.580			
Total	2040.029	342				

Sig = significance

In table 3, attitude in broken home accounted for 40.2% of the total variance of verbal aggressive behaviour (R square = .402; $F_{1, 342} = 228.783$; $p < 0.05$). This means that, attitude in broken homes causes verbal aggressive behaviours of the subjects researched. Thus, the null hypothesis which states that, there is no significant relative influence of attitude in broken home on verbal aggressive behaviour is rejected.

Discussion of the Findings

The result of hypothesis one showed that the null hypothesis which states that, there is no significant relationship among the independent and the dependent variable is hereby rejected. This means that, as attitude in broken home increase, all the types of aggressive behaviour also increase. The answer to the corresponding research question revealed that, there is a high degree of relationship between aggressive behaviour and attitude in broken home. The relationship as shown in this study is in line with the findings of Lokoyi (2015).

The outcome of the null hypothesis two which states that, there is no significant relative influence of attitude in broken home on physical aggressive behaviour is rejected. The answer to the corresponding research question which revealed that, attitude in broken home accounted for the total variance of

physical aggressive behaviour this means that, attitude displayed in broken homes leads to physical aggressive behaviours of the students. This finding is in agreement with the finding of Bi, Yang, Li, Wang, Zhang, & Deater-Deckard (2018) which found that the higher rates of verbal punishment predicted verbal adolescents-parents, aggression against both parents which suggest that there may be modeling effects in which children learns from their parents that verbal aggression is an acceptable way. Kumari and Kumar (2018) reported that family physical and social violence dimension is positively related to verbal aggressive behaviour.

The outcome of null hypothesis three which states that, there is no significant relative influence of attitude in broken home on verbal aggressive behaviour is rejected. Answer to the corresponding research question is that, attitude in broken home accounted for the total variance of verbal aggressive behavior. This means that, attitude in broken homes causes verbal aggressive behaviours of the subjects researched

Recommendations

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

1. Parent and grown up adults in the family should be enlightened on the negative impact of broken home and the need to avoid such situations and practices. This will allow students grow in a peaceful and supportive environment and increases students performance, enabling them to eschew all manners of physical, verbal, anger and hostility forms of aggression.
2. Counsellors and psychologist's services should be effectively deployed in schools to help students with broken home exposure through treatment packages understand ways they can develop resilience in spite their experiences.
3. Governmental and nongovernmental organizations should provide more awareness through media channels the increasing rate and forms of broken home in the society with its resultant negative effect on aggressive behavioral pattern of students.
4. The legal system should consider laws that could help to curb broken home because it has been discovered that more need to be done at bringing perpetrators to book. This will make perpetrators to broken home minimize.

The prevalence of such practices and will help students learn better ways of relating with people thereby shunning acts of physical and verbal, anger and hostile form of aggression in their day to day lives.

References:

- Aluede, M. (2020). Domestic Violence and Adolescent Psychological Functioning among Secondary School Students in the Benin Metropolis of Nigeria: *European Journal of Educational Studies* 1(1), 1-6.
- Asare, E., & Kwafua, M. (2017). Understanding management in living. Accra: Kwadwoan Publishing.
- Bi, X., Yang, Y., Li, H., Wang, M., Zhang, W. & Deater-Deckard, K. (2018) Parenting Styles and Parent-Adolescent Relationships: The Mediating Roles of Behavioral Autonomy and Parental Authority, *Front. Psychol.*, 13 | <https://doi.org/10.3389/fpsyg.2018.02187>
- Cleen Foundation (2022) OjoDu, Nigeria. www.cleen.org.
- Gilliland, M. K. (2022) *About the Society for Anthropology in Community Colleges (2nd ed)*. pressbooks.pub Grapevine Publishing Services (<http://perspectives.americananthro.org/>)

- Haruna, M. (2015). *Efficacy of Token-Economy and Time-Out Techniques in Reducing Aggressive Behaviour among Students of Federal Unity Schools in Kano and Katsina State, Nigeria*. (Doctoral Thesis, Ahmadu Bello University, Zaria). Retrieved from kubanni.abu.edu.ng/8080/jspui/handle/123456789/22/browse?
- Igbo E. U. M. & Chinwokwu E. C. (2020) The Privatization of Security and the Participation of Private Security Companies in Crime Control in Nigeria, *International Journal of Social Sciences and Management Research* E-ISSN 2545-5303 P-ISSN 2695 2203 (6) 5 2020 www.iiardpub.org IIARD
- Jhangiani, R. & Tarry, H. (2021) *Principles of Social Psychology* – 1st international H5P Edition. Creative Commons Attribution.
- Kumari, V & Kumar, P (2018) Determinants of Aggression among Adolescents. *International Journal of Current Microbiology and Applied Sciences*. ISSN: 2319-7706 Special Issue-7, 5010-5020 <http://www.ijcmas.com>.
- Lokoyi, O. L.O. (2015) Parenting styles as Correlates of Aggressive Behaviour Among School Adolescent with Mild Intellectual Disability. *Psychology and Behavioral Sciences* 4(3):94 <https://doi.org/10.11648/j.pbs.20150403.12>
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30, 607-610
- Omoteso, B. A. (2010). Bullying Behaviour, Its Associated Factors and Psychological Effects among Secondary School Students in Nigeria. *Journal of International Social Research* 3(10), 498-508.
- Progovac, L & Benitez-Burraco, A. (2019) From Physical Aggression to Verbal Behavior: Language Evolution and Self-Domestication Feedback Loop. *front. Psychol.* 10:280 Sec. Evolutionary Psychology 10 - 2019 | <https://doi.org/10.3389/fpsyg.2019.02807>.
- Ronald, V. (2019). Can work and training programs reform welfare? *Journal of Labor Research*, 14(3), 265-281.
- Tinuola, F. R. (2021) *Introduction to Sociology: African culture, context and complexities*. 107 – 117. Publisher: Apex Publisher, Lagos
- Spielberger, C. D. (2015). State-Trait Anger Expression Inventory. *Corsini Encyclopedia of Psychology*. do: 10.1002/9780479216.corpsy0942