

The Influence of Sociodemographic Factors on Anti-Social Behavior among Children: A Case of Bobaracho Area, Nyaribari Chache, Kenya

Abstract:

Background: Antisocial behaviour among children has become a growing concern, often linked to various family and sociodemographic factors. This study aims to investigate the influence of these sociodemographic variables on children's antisocial behaviour in the Bobaracho area of Kisii County, Kenya. **Methodology:** A descriptive survey approach was employed, targeting a population of 200 students. A stratified sampling method was used to select a sample of 150 children aged 14-20 years. **The objective:** To find out the association of sociodemographic factors with the anti-social behaviors' children from Bobaracho area, Nyaribari Chache, Kenya. **Null hypothesis:** There is no association in sociodemographic factors and antisocial behavior among children in Bobaracho area. **The aim:** To investigate the influence of sociodemographic variables on children's antisocial behaviour. Data was collected through structured questionnaires and qualitative interviews. Quantitative data were analysed using SPSS version 20, while qualitative responses were categorized thematically. **Findings:** The analysis revealed significant factors influencing antisocial behaviour, including early parenting practices, media exposure, inadequate counselling, family separation, and lack of parental care. Notably, family conflict and parents' disciplinary responses were also critical. Key statistics indicated only 95.3% children responded. The gathered data revealed poor parenting (29%), media influence (7.7%), inadequate counseling (14%), broken homes (14.7%), peer influence (11.9%) and drug abuse (23%) influenced anti-social behavior. Additionally, the study showed that children's anti-social behavior was influenced by family conflict, parents' responses to their children's activities, and the discipline applied or not applied. **Conclusion:** The study suggests that in addition to receiving education on effective parenting, parents, and guardians should be encouraged to monitor their children's behavior, adjust household conditions to promote healthy child development, and monitor their children's behavior. School heads who report to the board of management ought to consult specialists when providing advice and counseling.

Keywords: anti-social behaviors, parenting, sociodemographic, family separation

Introduction

The conduct code that characterizes an individual's undesirable behavior is known as anti-social behavior. Ibegbunam and Wachikwu (2012) [8] define anti-social behavior as crimes done by young people under the age of eighteen that involve a breach of societal norms and established values. Vandalism, aggressiveness, disobedience of the law, and a breach of social standards are examples of anti-social behavior (Ibegbunam and Wachikwu, 2012) [8]. Anti-social behavior is described by Wellegrini and Solberg (2010) [10] as disruptive behavior coupled with hidden animosity and global aggressiveness toward other individuals. Consequently, the foundation for a society where people can live in harmony with one another is a general lack of adherence to societal norms and standards (Hanrahan and Akers, 2017) [3].

Children may be diagnosed with mental conduct behaviour if their troublesome behaviors are severe enough to interfere with normal development and last for extended periods of time. These actions could include not paying enough attention, having trouble with discipline, fighting frequently, or purposefully hurting other people. Additional behaviors could be lying, stealing, doing damage to property, abusing drugs, engaging in sexual activity when young, hanging about with negative peer pressure, disobeying community norms or expectations, or, in extreme circumstances, breaching the law Ibegbunam and Wachikwu (2012) [8].

Antisocial conduct is a significant issue in Kenyan society and schools (Nyaga, 2015) [16]. Drug addiction, truancy, and aggressiveness are some of the delinquent behaviors that define it. These activities are linked to unfavorable relationships with peers, parents, and teachers. The behavior pattern is internalized and learned; it will stop if it is not rewarded, but it will continue if it is (Omote, Thinguri, and Moenga, 2015) [18]. Antisocial behavior is directly correlated with the degree, likelihood, and frequency of reward it receives.

In terms of gender, boys are more aggressive than girls; they carry dangerous weapons, abuse drugs, and fight more frequently. These aggressive behaviors are associated with low parental supervision and bad parenting (Jurado, 2017) [11]. Teachers' attire tends to minimize their personalities and prestige in the eyes of students, and broken households strongly impact schoolchildren's maladaptive behavior (Aboh, 2014) [1]. The relationship between community violence and teenage antisocial behavior is strongly correlated, with parental supervision moderating this relationship (Rovis, Basic, and Jonkman, 2016)[20].

The criminological and drug literature have established a strong correlation between the use of illicit drugs and various forms of criminal behavior, including the use of marijuana (bhang), alcohol, and inhalants, which can lead to anti-social behavior when under the influence of drugs (Rovis, Basic, and Jonkman, 2016) [20]. According to a study by Ojo (2017) [17], inadequate school administration, broken households, a lack of parental care, media, and peer influence, and a lack of counselors in schools are some common causes of anti-social behavior.

The results demonstrated that exam malpractice, abortion, rape, stealing, tardiness, rudeness, and cultism were the most prevalent forms of anti-social behavior among minors. The anti-social behaviors and their causes were closely studied by Akande and Ikediasi (2015) [2], who referred to several elements, including gender, sociodemographic, residential location, peer influence within the group, and their impacts. According to Omondi, Ongaro, Gitonga, and Muriungi (2017) [7], conduct disorder was more common in men than in women, it got worse as kids got older, and religion had a big influence.

Children's criminal behavior is influenced by a variety of complicated elements, including peer and parental influences, socio-psychological factors, economic position, and drug usage (Nation, Pastore, Santinello, and Vieno, 2009) [19]. The majority of secondary school pupils are teenagers, and they deal with issues related to emotional intelligence, intellectual awareness, social identity, and interests (Unachukwu and Nwankwu, 2001) [23].

Contributory factors to the development of anti-social behavior include inadequate parental supervision and discipline, family conflicts between parents and children or between parents, a family history of behavioral problems, parental attitudes, ways of justifying problem behavior, and a social home environment (South Holland District Council, 2004) [6]. Children's indulgence in internalizing values and personalities is determined by their upbringing (Mart and Palma, 2010) [12]. Children from low-income families may behave in an antisocial manner (Slattery and Meyer, 2014) [14]. According to the study, specific parenting styles are strongly associated with antisocial behavior in young children, which develops into more severe behavior in adolescents. A cycle of coercion or punishment can arise in the home when children place demands on parents who are not skilled at parenting.

The causes of anti-social behavior, according to Black (2006) [5], include the fact that the parents of delinquent boys were either criminals or, more frequently, alcoholics and that their families were regularly disturbed by parental absenteeism and separation. Adequate supervision and inappropriate

discipline have been linked to children's anti-social behavior. Parents who are worried or involved often control and supervise their kids' behavior, establish ground rules for the family, keep an eye on their locations, make sure their kids aren't getting into trouble, and tease them into following the rules. However, because parents are unavailable and antisocial parents lack the drive to regularly check on their kids, children in busy households and broken homes receive less supervision (Black, 2006) [5]. Research on behavioral genetics involving twins and adoptees has shown that genetics contributes to anti-social behavior like aggression and criminality and that personality traits like sensation-seeking, impulsivity, risk-taking, and callous-unemotional traits are partially influenced by genetics (Raine, Baker, and Bezdjian, 2006) [4]. Studies conducted by Molero (2017) [11] examined the interpersonal values and anti-social behaviors of high school students. The findings showed that male and senior students were more likely to engage in anti-social behavior and that students who scored highly on stimulation, independence, recognition, and leadership and poorly on conformity and benevolence were more likely to engage in anti-social behavior.

Low anti-social behavior, such as lower pro-social behavior, higher self-regulation, and lower aggressive behavior in schools, was predicted by children who attend school infrequently (Sammons, 2014) [18]. High levels of externalizing behavior have been linked to poor relationship quality, such as high levels of conflict and inadequate emotional bonding between parents and children (Wissink and Meijer, 2004) [24, 25]. The familial history of the child is often regarded as the most important component in the development of anti-social behavior, despite other factors that are continually affecting the child including low socioeconomic position, single-parent families, and marital strife. An analysis was conducted on the relationship between age, gender, personality, socioeconomic status, social skills, family environment, and self-concept in connection to manifestations and transgressions of anti-social behavior in men and women.

Objectives of the study

To find out the association of sociodemographic factors with the anti-social behaviors' children from Bobaracho area, Nyaribari Chache, Kenya.

Null Hypothesis.

There is no association in sociodemographic factors and antisocial behavior among children in Bobaracho area.

Aim of the study

To investigate the influence of sociodemographic variables on children's antisocial behaviour.

Limitations of the study

The study acknowledges potential limitations, such as the focus on a single geographic area, which may affect the generalizability. The study focused on children below 20 years, some teens above 20 years may also be effective in the study.

Methodology

The research design used in the study was a descriptive survey. Two hundred schoolchildren were the intended audience. 150 children aged 14-20 years took part in the study since 50 children did not respond to the invitation of the study, and samples were taken using stratified sampling method, and selected a representative sample of male and female children. Children were divided into eight groups and then randomly selected from each group giving 150 participants. The questionnaire was used to get quantitative data which was composed of set of questions which both had Likert scale and open-ended questions, and the interview guide was used to gather qualitative data on their parents' status which was divided in five sections. Pilot research was conducted to assess the validity of the questionnaires, the participants' comprehension of the questions, and the time required to determine the correctness and suitability of research tools.

The researcher obtained an ethical review certificate from the National Commission for Science, Technology, and Innovation (NACOSTI) as well as the Kisii County Director of Education and school head teachers. The researcher sought consent from the respondents by not writing their names on the tools and was voluntary. All raw data collected in this study were analyzed using STATA software version 15. The predictors of antisocial behaviors were determined and were presented as frequencies with respective percentages. Continuous data, such as age and class level, were presented as medians and interquartile range (IQR) since they were skewed. Bivariable analyses was conducted using generalized linear models (GLM) with Gaussian family and identity links to the sociodemographic determinants of antisocial behaviors among. All the variables in the bivariable model were added to the univariable model. Results were presented in tables.

Children Operation	No. of Children	Percentage
Boarding	2718	
Day	12382	
Total	150100.0	

Table 1. Sample size of children

Results and Discussion

Response Rate

The sample size of the study was 150 school children. Those who participated in the interview, filled out the questionnaires, and returned were 143(95.3%), children, while those who didn't respond and never returned the questionnaires were 7(4.7%) children as presented in *Figure 1*.

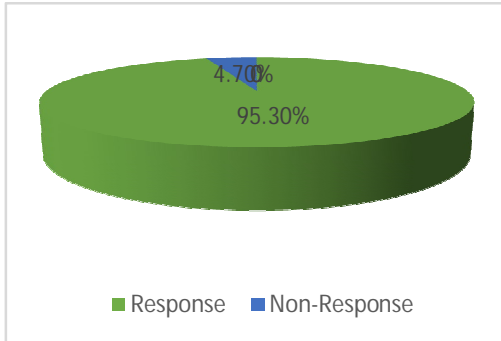


Figure 1. Response Rate

Gender of the Respondents

The study established gender distribution because the level of anti-social behaviors differs significantly in females and males. The majority of children were male 79(55.2%), while 64(44.8%) were female. Male children indicated anti-social behaviors more as compared to females as outlined in *Figure 2*

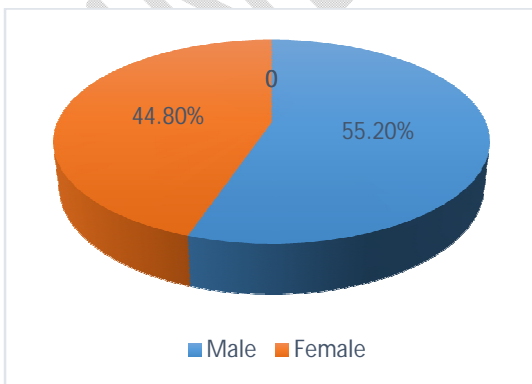


Figure 2. Gender of the Respondents

Religious Background of the Respondents

Data on religious background were gathered for the study since it improved the correlation between children's religious viewpoints and beliefs and their degree of discipline. The study expected that the correlation between children's religious background and their degree of discipline or indiscipline would shed light on how children's religious identities interact to shape anti-social behavior. About 54(37.8%) of the population identified as Catholic, followed by Pentecostal churches 33(23.1%), pagans 26(18.1%), Seventh Day Adventist churches 21(14.7%), and other churches 9(6.3%). Given that Catholicism predominates in the area, it is evident that most households practice this religion primarily.

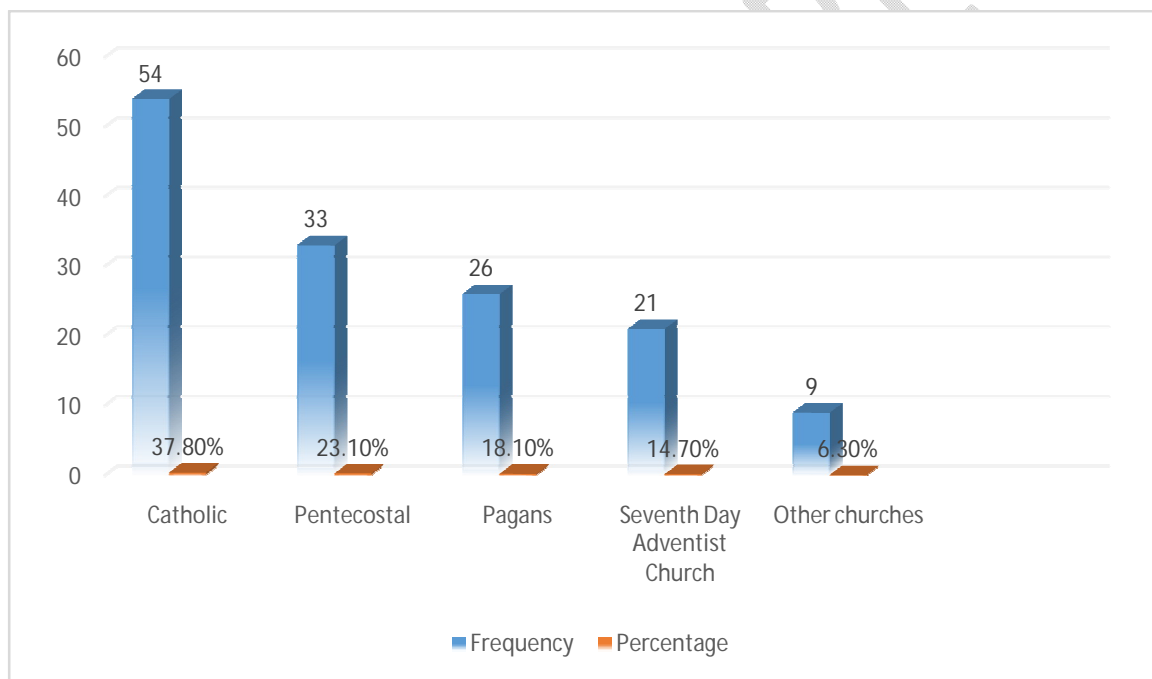


Figure 3. Religious Background of the Respondents

Class level of Children

The study collected data on the class level of children because class level might participate in a significant role in making decisions since it determines the academic achievements of children and

decision-making capability. Children in form two were much showing anti-social behaviours (48.3), and the study assumed was due to the middle of adolescence, as shown in below *table 2*.

Class	Frequency	Percentage
Form one	41	28.7
Form two	69	48.3
Form three	21	14.7
Form four	12	8.3
Total	143	100.0

Table 2. Respondents' Class Level

Family Background

The information about children's family backgrounds was gathered because children's behavior is influenced by their parents' presence and care. The behaviors of partial and total orphans differ from those of their parents. It is proof that 79 children, or 55.2%, had parents who raised them, whereas 43 children, or 30.1%, were partially orphaned, and 21 children, or 14.7%, were orphans. A child's behavior development is greatly influenced by their parents.

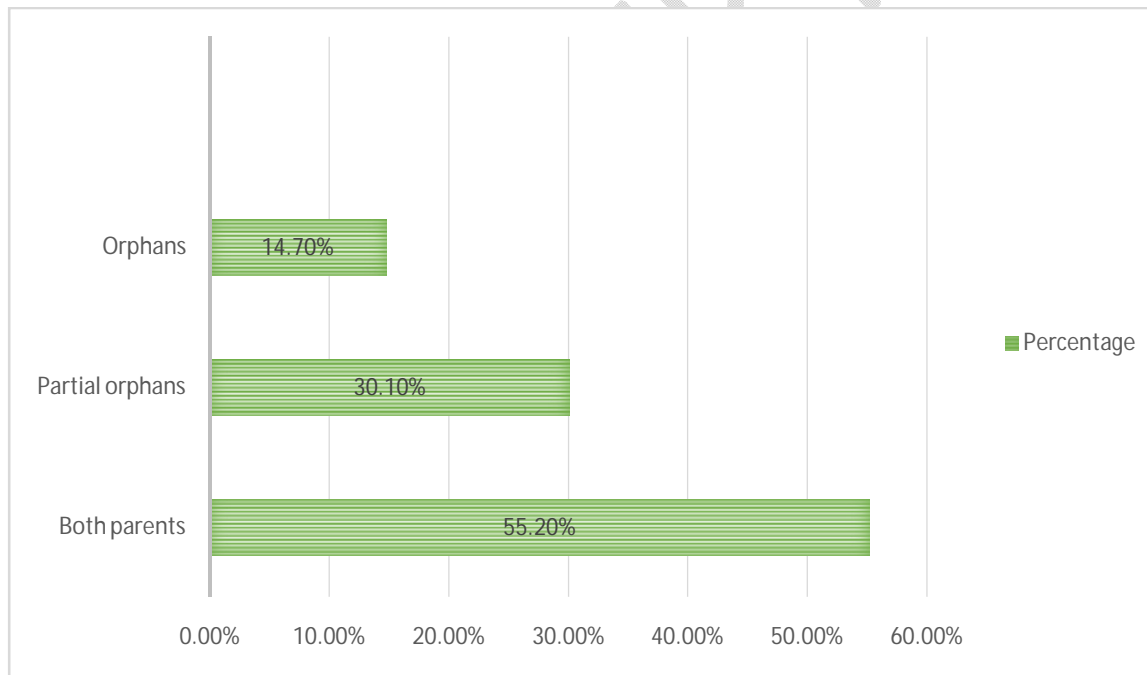


Figure 4. Family Background

Predictors of Anti-Social Behaviour

The study examined the variables that impact children's antisocial behavior, including peer pressure, media influence, broken households, ineffective counseling, and drug addiction by parents as displayed below.

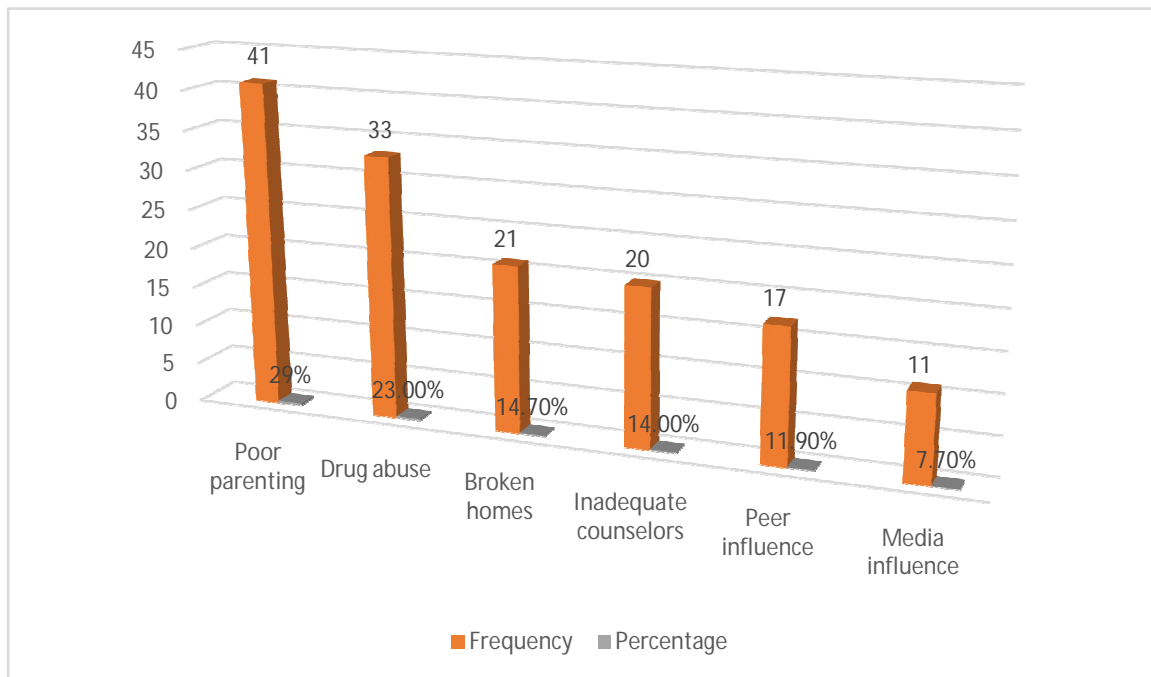


Figure 5. Predictors of Anti-Social Behaviour

Contributory Factors and Anti-Social Behaviours

Inadequate family discipline, parent-child and parent-parent disputes, parental attitudes, the home and social context, and a family history of behavioral issues were identified and examined. A significant proportion of children (37.8%) said that insufficient parental discipline was the primary cause of anti-social behavior among children. The core of a child's development is their parents' views toward them, and these sentiments have a quarterly impact on the antisocial behavior of the children. The antisocial behavior exhibited by children was not significantly influenced by the behavior of their family as indicated in Table 3.

Family Features	Frequency	Percentage
Inadequate parental discipline	54	37.8
Parent-parent conflict	13	9
Parent-child conflict	17	11.9
Attitude of parents	29	20.3
Home and social environment	21	14.7
Family history on behaviours	9	6.3
Total	143	100

Table 3. *Contributory Factors and Anti-Social Behaviours*

Family Economic Status and Anti-Social Behaviour

The children were asked to disclose if they were from a wealthy, poor, or both types of households. Tabulated results showed that, whereas 36.4% of children indicated both affluent and poor backgrounds, the majority of children (45.5%) recognized that anti-social problems originated from impoverished backgrounds. The impact of anti-social behaviors was less mentioned by children from wealthy backgrounds (18.1%). Figure 6 illustrates how antisocial behavior in youngsters may be influenced by a disadvantaged familial background, according to Meyers (2014) [14].

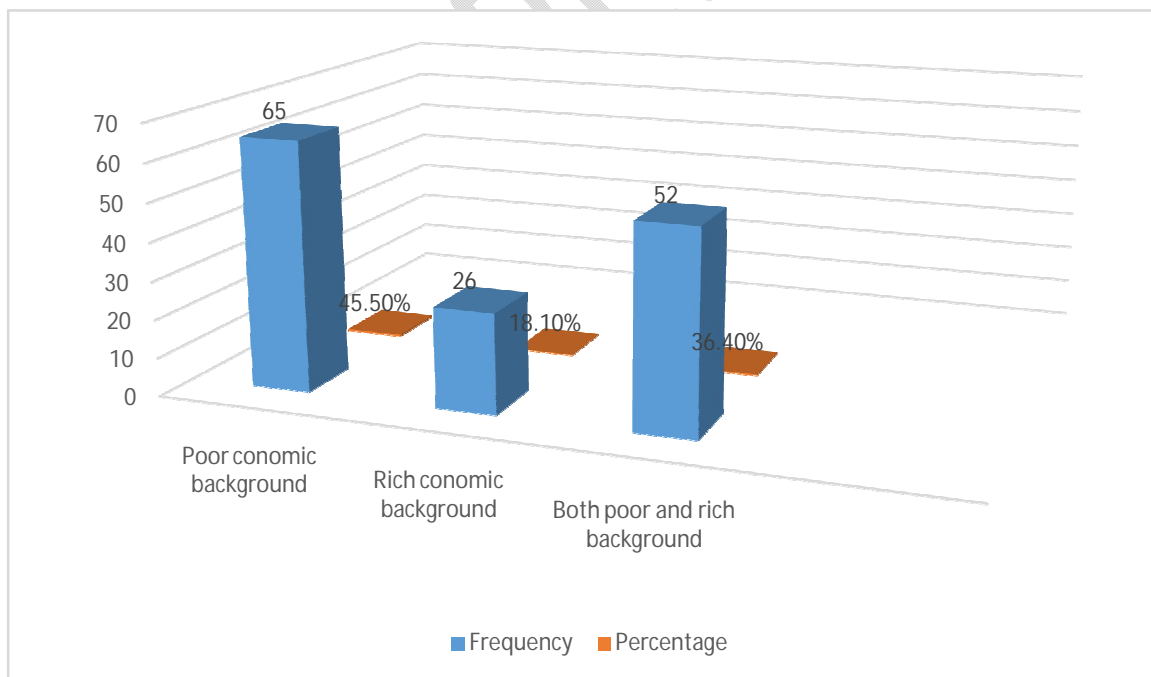


Figure 6. *Family Economic Status and Anti-Social Behaviour*

A univariable generalized linear model regression analysis of the Sociodemographic Determinants of Children's Antisocial Behavior

A univariable generalized linear model regression analysis was conducted to explore the influence of sociodemographic on children's anti-social behaviors (sociodemographic and anti-social behaviors), considering both sociodemographic and anti-social behaviors factors (Table 4). Sociodemographic factors varied associations with anti-social behaviors. Gender had a weak, non-significant positive association with sociodemographic ($\beta = 0.5$, 95% CI [-0.4, 1.4], $p = 0.244$), while class level had no significant effect on either sociodemographic or gender ($\beta = 0.5$, 95% CI [-0.1, 1.3], $p = 0.081$ for sociodemographic; $\beta = 0.0$, 95% CI [-0.2, 0.3], $p = 0.849$ for gender). Children from broken homes reported significantly **low income** sociodemographic ($\beta = -0.6$, 95% CI [-1.5, -0.4], $p = 0.176$) but had slightly higher anti-social behaviors ($\beta = 0.1$, 95% CI [-0.2, 0.5], $p = 0.566$) compared to children from poor families (family background) ($\beta = 2.5$, 95% CI [1.7, 3.5], $p < 0.001$ for sociodemographic; $\beta = -0.4$, 95% CI [-0.7, -0.2], $p = 0.024$ for gender). The family economic status did not significantly influence anti-social behaviors ($\beta = 0.1$, 95% CI [-0.2, 0.4], $p = 0.566$ for sociodemographic; $\beta = 0.0$, 95% CI [-0.1, 0.2], $p = 0.397$ for anti-social behaviors) (Table 4).

Predictors of anti-social behaviors factors influence anti-social behaviors. Poor parenting, drug abuse, peer influence, broken homes, media influence and inadequate counselors was associated with significant increase in poor sociodemographic but expectedly, increases anti-social behaviors (Table 4). Interestingly, attitudes of parents had no significant association with sociodemographic ($\beta = 0.4$, 95% CI [-3.7, 4.2], $p = 0.859$) and a weak negative association with anti-social behaviors ($\beta = -0.2$, 95% CI [-1.7, 1.2], $p = 0.759$). Family history of behavior on the other hand, was associated with both increased poor sociodemographic ($\beta = 1.7$, 95% CI [0.4, 2.8], $p = 0.019$) and increases anti-social behaviors ($\beta = -1.1$, 95% CI [-1.7, -0.8], $p < 0.001$), as expected (Table 4).

Inadequate parental discipline ($\beta = -2.0$, 95% CI [-3.4, -0.7], $p = 0.004$), home and social environment ($\beta = -1.7$, 95% CI [-2.8, -0.6], $p = 0.003$), parent-parent conflict ($\beta = -1.8$, 95% CI [-2.7, -0.8], $p = 0.0$), and Parent-child conflict ($\beta = -1.8$, 95% CI [-4.0, -0.6], $p = 0.006$) were all associated with increased poor sociodemographic. However, these same factors expected were also associated with good social behaviors (inadequate discipline: $\beta = -2.8$, 95% CI [0.5, 1.4], $p < 0.001$; home and social environment: $\beta = 0.7$, 95% CI [0.3, 1.1], $p = 0.003$; parent-parent conflict: $\beta = 0.6$, 95% CI [0.3, 0.9], $p = 0.003$; parent-child conflict: $\beta = 0.5$, 95% CI [0.2, 1.0], $p = 0.009$) (Table 4).

Predictors	Sociodemographic		Antisocial Behavior	
	Beta Coefficient β (95%CI)	P value	Beta Coefficient β (95%CI)	P value
Gender	0.5(-0.4-1.4)	0.244	0.1(-0.2-0.3)	0.410
Class Level	0.4(-0.1-1.3)	0.081	0(-0.2-0.3)	0.849
Broken homes	-0.6(-1.5-0.4)	0.176	0.7(0.4-3)	<0.001
Family background	2.5(1.7-3.5)	<0.001	-0.4(-0.7--0.2)	0.024
Family economic status	0.1(-0.2-0.4)	0.566	0(-0.1-0.2)	0.397
Predictors of anti-social behaviors	2.4(0.2-4.4)	0.028	-1(-1.7--0.4)	0.004
Attitudes of parents	0.4(-3.7-4.2)	0.859	-0.2(-1.7-1.3)	0.759
Family history of behavior	1.7(0.4-2.8)	0.019	-1.1(-1.7--0.8)	<0.001
Inadequate parental discipline	-2.0(-3.4--0.7)	0.004	-2.8(0.6-1.5)	<0.001
Home and social environment	1.7(-2.8--0.6)	0.003	0.7(0.3-1.1)	<0.003
Parent-parent conflict	1.8(-2.7--0.8)	0	0.6(0.3-0.9)	0.003
Parent-child conflict	-1.8(-4--0.6)	0.006	0.5(0.2-1)	0.009

Table 4. A univariable generalized linear model regression analysis of the Sociodemographic Determinants of Children's Antisocial Behavior

Conclusions

Based on the study's aims, the following conclusions are drawn:

- i. The study found that antisocial behavior is influenced by family-based factors. The study comes to the conclusion that family-related factors, such as family conflict and a history of problematic behavior, have an impact on secondary school students' anti-social behavior. Since the family is the backbone of raising and nurturing children, there should be good examples from parents to motivated positive relationship among family members which creates positive behaviors among children.

- ii. The study suggests that anti-social behavior is triggered by school-based variables, including peer pressure, the school atmosphere, and insufficient supervision and counseling if not well measured. The school should ensure children are not controlled by negative forces such as peers to indulge into negative behaviors.
- iii. The study found that there are notable differences between the values and attitudes taught in schools and the home environment. Thus, the study shows that students' behavior is significantly shaped by their families and schools, which serve as the fundamental socialization unit. Therefore, homes and schools should emphasize on good nurturing of children by correcting and guarding them to proper behaviours.

Recommendations

After a thorough analysis of the study's findings, the following list of policy recommendations was developed by the researchers:

- i. **Strengthening Family-School Partnerships:** Implement programs that foster collaboration between parents and schools, such as parent education workshops on effective communication and discipline strategies, as well as regular communication channels between teachers and parents to address behavioural concerns.
- ii. **Creating a Supportive School Environment:** Develop and implement school-wide initiatives to promote positive social norms, address peer pressure, and provide adequate supervision and counselling services. This could include establishing peer mentoring programs, training teachers in conflict resolution and classroom management techniques, and ensuring access to school counsellors or social workers.
- iii. **Addressing Systemic Factors:** Advocate for policies and programs that address broader societal issues contributing to antisocial behaviour, such as poverty, inequality, and exposure to violence. This could involve collaborating with community organizations to provide resources and support to families in need.
- iv. **Further Research:** Future research should explore the effectiveness of specific interventions targeting the identified risk factors, investigate the influence of media exposure on antisocial behaviour, and examine the generalizability of the findings to other contexts and populations.

Ethical Approval:

As per international standards or university standards written ethical approval has been collected and preserved by the author(s).

Consent

As per international standards or university standards, respondents' written consent has been collected and preserved by the author(s).

Disclaimer (Artificial intelligence)

Author(s) hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc.) and text-to-image generators have been used during the writing or editing of this manuscript.

Reference

1. Agu, S. A., Chikwendu, C. E., Nwankwo, B. E., and Aboh, J. U. (2014). An investigation on the variables influencing high school students' maladaptive behavior. *International Journal of Behavioral Sciences and Psychology*, 4(6), 215-220.
2. Akande and N. N. Ikediasi (2015). Antisocial conduct among teenagers in Nigeria. *Journal of Educational Research and Methodology*, 5(4), 31–36.
3. Akers, R. (2017) Hanrahan (2006). A broad theory of crime and deviance: Social learning and social structure.
4. Bezdjian, S., Baker, L. A., and Raine, A. (2017). The science of antisocial conduct is called behavioral genetics. *Law and Modern Issues*, 69(1-2), 7.
5. Black (2006). Antisocial Personality Disorder: What Causes It? Mental Health Central. <http://mentalhealthcentral.com/lib/>.
6. District Council of South Holland, 2014. Children's antisocial behavior and neighborhood disorder: The protective
7. Gitonga (2017); Muriungi (2017); Ongaro (2017); Omondi (2017). The Kamukunji and Olympic Mixed Sub-County Secondary Schools in Nairobi County, Kenya, provide a case study on the prevalence of conduct disorder among adolescents attending secondary schools.
8. Ibegunam, J. O., and Wachikwu, T. (2012). Psychosocial elements impacting antisocial conduct in high school pupils in Rivers State's Obio-Akpor Local Area. *Journal of Educational Development International*, 2 (1), 104–113
9. Ikediasi and Akande (2015) Odgers, C. L., Moffitt, T. E., Bates, C. J., Donley, S., Caspi, A. (2015). Low-income males are more likely to engage in anti-social conduct if they live next to more affluent neighbors. 56(10), 1055–1064, *Journal of Child Psychology and Psychiatry*.
10. Long, J. D., Solberg, D., Roeth, C., Dupuis, D., Bohn, C., & Hickey, M. Wellegrini, A. D. (2010). Bullying and social standing during changes in school. *International viewpoint on the handbook of bullying in schools*, pages 199–210.

11. Luque de la Rosa, A., Garzón Fernández, A., Martos Martínez, Á., Carrión Martínez, J. J., Molero Jurado, M. D. M., Pérez Fuentes, M. D. C., & Gázquez Linares, J. J. (2017). Interpersonal values and antisocial behavior in high school pupils. *Psychology's frontiers*, 8, 170.
12. Martí V., M., & Palma Cort, J. (2010). Students' jerarquización y preference for values in secondary school Secondary kids' predilection for certain values and a hierarchical structure.
13. Martínez, Á. M., de la Rosa, A. L., Fernández, A. G., Jurado, M. D. M. M., Fuentes, M. D. C. P., & Linares, J. J. G. (2017). Interpersonal values and antisocial behavior in high school pupils. *Psychology frontiers*, 8.4,
14. Meyers, S., and T. Slattery (2014). Family, peer, and neighborhood factors have a developmental influence on the contextual predictors of anti-social behavior in adolescents. doi:10.1007/s10560-013-0309-1. *Child & Adolescent Social Work Journal*, 31(1), 39–59.
15. Nwankwo, B., O. Nwoke, E. U., Chukwuocha, U. M., Obbany, A. O., Nwoga, K.C., Iwuagu, U.O., & Okereke C. (2010). Anti-social behavior prevalence and predictors: a cross-sectional study of teenagers attending secondary schools in Owerri Municipality, South-East, Nigeria. *Journal of Sociosciences in Pakistan* 7 (2) 129-136
16. Nyaga (2015) M. N. Doctoral dissertation, Kenyatta University; Contributions of Selected Microsystems to Anti-Social Behaviors among Adolescents in Secondary Schools in Manyatta Sub-County, Embu County, Kenya.
17. Ojo (2015), I. O. the reasons behind and frequency of antisocial behavior among Nigerian students with hearing impairments in Ibadan. *Education and Practice Journal*, 6(28), 38–43.
18. Omote, M. J., Moenga, M. E., and Thinguri, R. W. (2015). An examination of the management techniques and instances of student indiscipline used by Kenyan public high schools. 3(12), 1–10, *International Journal of Education and Research*.
19. Pastore, M., Santinello, M., Nation, M., and A. Vento (2009). A model of the relationship between teenage self-disclosure, parental control, and proximity and the impact of parenting on anti-social conduct in adolescents. 45(6), 1509; *developmental psychology*.
20. Rovis, D., Basic, J., & Jonkman, H. (2016). A Multilevel Analysis of Adverse Family Relations, School Bonding and Risk Behaviours among Adolescents. 25(2), 647-660 in *Journal of Child & Family Studies*. Publication: 10.1007/s10826-015-0223-6
21. Samuels P. (2014). Impacts on the social-behavioral development of pupils at 16 years old: September 2014, Effective Pre-School, Primary & Secondary Education Project (EPPSE).
22. Umanachukwu (1995). *Abnormal psychology*. Unpublished lecture notes from the University of Nnamdi Azikiwe in Awka.
23. Unachukwu, G.C., and Nwankwo, C.A. (2001). An assessment of the exam anxiety among university undergrads. *Africa's First Journal of Education and Psychology* 1(1): 37–42.
24. Wissink, I. B., Deković, M., & Meijer, A. M. (2004). A comparison of four ethnic groups reveals the influence of peer and family relationships on antisocial behavior in adolescents. *Adolescent Journal*, 27(5), 497–514.

25. Wissink, I. B., Deković, M., & Meijer, A. M. (2004). A comparison of four ethnic groups reveals the influence of peer and family relationships on antisocial behavior in adolescents. *Adolescent Journal*, 27(5), 497–514.
26. Zion, A., Sammons, 2014. Was predicted by children who attend school infrequently.

UNDER PEER REVIEW