



Sociodemographic Characteristics Associated with Conduct Disorder Among Adolescents in Selected Secondary Schools in Ruiru Sub-County, Kenya

¹Lily Khalayi Alulu, ²Dr. Priscilla Mugambi, ³Dr. Sylvia Tuikong

¹ School of Psychology

² Department of Clinical Psychology

³ Daystar University

DOI: <https://doi.org/10.47772/IJRISS.2026.100801025>

Received: 09 September 2026; Accepted: 14 September 2026; Published: 24 September 2026

ABSTRACT

Conduct Disorder (CD) is an important behavioural and mental health concern among adolescents and is associated with adverse social, academic, and psychological outcomes. This study examined the association between selected sociodemographic characteristics and CD among adolescents in selected secondary schools in Ruiru Sub-County, Kiambu County, Kenya. A quantitative analytical approach was used among 90 adolescents aged 15–19 years from two selected secondary schools. Data were collected using a Conduct Disorder Scale and a sociodemographic questionnaire and analysed using SPSS version 29. Gender was significantly associated with CD scores, with male adolescents recording higher scores than females ($p < .001$). Age, class level, family structure, number of siblings, maternal educational level, and paternal educational level were not significantly associated with CD scores. However, the number of rooms in the household was positively and significantly associated with CD scores ($p = .021$). Although the individual association between number of rooms and CD was significant, the combined regression model involving age, number of rooms, and number of siblings did not significantly predict CD scores. Overall, the findings indicate that gender and selected household characteristics were associated with CD, although sociodemographic characteristics had limited explanatory power when considered collectively. The study recommends strengthening school-based screening, early identification, counselling, and referral services while considering broader individual, family, psychological, social, and environmental factors in addressing CD among adolescents.

Keywords: Conduct Disorder; adolescents; sociodemographic characteristics

INTRODUCTION

Adolescence is a critical developmental period characterized by substantial biological, psychological, and social changes. Although behavioural difficulties may occur during this period, persistent patterns of aggression, rule violation, and disregard for the rights of others may indicate Conduct Disorder (CD), a psychiatric condition associated with significant impairment in social, academic, and family functioning (Junewicz & Billick, 2020). According to the American Psychiatric Association (2025), CD is characterized by a repetitive and persistent pattern of behaviour in which the basic rights of others or major age-appropriate societal norms and rules are violated. The disorder may manifest through aggression toward people or animals, destruction of property, deceitfulness or theft, and serious violations of rules. Early identification of CD is important because persistent conduct problems during adolescence may be associated with poor psychosocial outcomes and an increased risk of antisocial behaviours later in life (Frick et al., 2018; Loeber et al., 2003).

The development and expression of CD are influenced by multiple interacting factors, including individual, family, social, and environmental characteristics. Sociodemographic factors such as age, gender, socioeconomic circumstances, family structure, parental characteristics, and living conditions may influence adolescents' exposure to risk and protective factors associated with behavioural difficulties. Evidence suggests that adolescents exposed to adverse family environments, inadequate parental care, socioeconomic disadvantage, and other forms of childhood adversity may be at increased risk of behavioural and mental health problems (Erskine et al., 2016; Nagata et al., 2023). Similarly, family circumstances and parental characteristics may influence adolescents' social development, behavioural regulation, and ability to conform to social expectations (Kruse & Malas, 2024).

Gender is one of the sociodemographic characteristics most consistently associated with conduct-related difficulties. Research has generally reported higher levels of overt aggression and conduct problems among boys, although the manifestation of behavioural difficulties may differ between boys and girls (Broidy et al., 2023; Predescu & Sipos, 2023). Age may also influence the presentation and persistence of conduct problems, with some evidence indicating that earlier onset is associated with more persistent and severe behavioural difficulties (Farrington, 2013; Loeber & Farrington, 2010). However, the relationship between sociodemographic characteristics and CD may vary across populations and contexts, highlighting the importance of context-specific evidence.

Family-related characteristics may also be relevant to the development of conduct problems. Family structure, parental education, household socioeconomic circumstances, and the availability of basic household resources can influence adolescents' developmental environments. Parenting practices are similarly important, with evidence suggesting that parental warmth, supervision, discipline, and responsiveness can shape adolescent behavioural outcomes. However, sociodemographic characteristics should not be interpreted as direct causes of CD, as conduct problems are multifactorial and may arise through complex interactions among individual vulnerabilities, family relationships, peer influences, psychological processes, and environmental conditions.

Despite increasing recognition of adolescent mental health and behavioural problems, evidence on the sociodemographic characteristics associated with CD among adolescents in Kenya remains limited, particularly within school settings. Understanding the characteristics associated with CD is important for identifying adolescents who may require further assessment and support and for informing school-based prevention and mental health programmes. Therefore, this study examined the prevalence of Conduct Disorder and the association between selected sociodemographic characteristics and CD among adolescents in selected secondary schools in Ruiru Sub-County, Kiambu County, Kenya. The study specifically examined characteristics including gender, age, class level, family structure, number of siblings, household characteristics, and parental educational levels in relation to adolescents' CD scores.

Statement of the Problem

Conduct Disorder (CD) is an important mental and behavioural health concern among children and adolescents, characterized by persistent patterns of aggression, rule violation, deceitfulness, destruction of property, and disregard for the rights of others (American Psychiatric Association, 2025). The disorder is associated with adverse academic, social, family, and psychological outcomes and may persist into adulthood if not identified and appropriately managed (Fairchild et al., 2019). Globally, CD is among the most common psychiatric disorders affecting children and adolescents, with community prevalence estimates of approximately 2–4% (Sadler et al., 2017; Ayano et al., 2024). In Africa, the estimated prevalence has been reported to be considerably higher, at approximately 9.7% (Jakobsson et al., 2024). In Kenya, Ngesa (2020) reported a prevalence of 36.4% among adolescents in rehabilitation facilities. These variations in prevalence highlight the importance of examining CD within specific populations and settings, particularly among adolescents in schools where behavioural difficulties may have implications for learning, relationships, and school participation.

Although CD is influenced by multiple individual, family, psychological, social, and environmental factors, sociodemographic characteristics may provide important indicators for identifying adolescents who are potentially at increased risk. Previous studies have reported associations between CD and characteristics such as gender, age, socioeconomic circumstances, family structure, parental characteristics, and household conditions. For example, boys have generally been reported to exhibit higher levels of overt conduct problems and aggression than girls (Broidy et al., 2023; Predescu & Sipos, 2023), while early-onset conduct problems have been associated with more persistent behavioural difficulties (Farrington, 2013; Loeber & Farrington, 2010). Family structure, parental education, household resources, and other aspects of the adolescent's living environment may also influence behavioural development. However, findings across populations are not always consistent, suggesting that the relationship between sociodemographic characteristics and CD may vary according to social and cultural context.

In Kenya, available evidence on CD among adolescents remains limited, particularly within mainstream secondary school settings. Existing studies have largely focused on specific high-risk populations or individual psychosocial factors, leaving gaps in understanding how demographic and household characteristics relate to CD among adolescents attending secondary schools. In Ruiru Sub-County, Kiambu County, increasing concerns regarding adolescent behavioural difficulties, including aggression, truancy, defiance, bullying, and other forms of indiscipline, underscore the need for empirical investigation. However, there is limited local evidence establishing the extent of CD and determining which sociodemographic characteristics are associated with elevated CD scores among adolescents in the school environment.

This evidence gap limits the ability of schools, parents, counsellors, and mental health practitioners to identify adolescents who may require further assessment and psychosocial support. Without context-specific evidence, behavioural difficulties may be addressed primarily through disciplinary measures rather than through appropriate mental health and behavioural support. Therefore, this study sought to determine the prevalence of Conduct Disorder and examine the association between selected sociodemographic characteristics and CD among adolescents in selected secondary schools in Ruiru Sub-County, Kiambu County, Kenya. Specifically, the study examined gender, age, class level, family structure, number of siblings, household characteristics, and parental educational levels in relation to adolescents' CD scores. The findings are expected to contribute to the limited Kenyan evidence on adolescent CD and provide information that can support early identification, school-based screening, counselling, referral, and targeted preventive strategies.

Significance of the Study

This study is significant because it provides evidence on the sociodemographic characteristics associated with Conduct Disorder (CD) among adolescents in selected secondary schools in Ruiru Sub-County, Kiambu County, Kenya. Understanding how characteristics such as gender, age, class level, family structure, parental education, and socioeconomic circumstances are associated with CD can help teachers, parents, school administrators, mental health professionals, and policymakers identify adolescents who may be at increased risk of behavioural difficulties. The findings can inform early identification, targeted school-based psychosocial support, parenting interventions, and appropriate referral for professional assistance. For policymakers, the evidence may contribute to the development of adolescent mental health programmes and resource allocation that address behavioural disorders within school and community settings. The study also adds to the limited Kenyan evidence on sociodemographic factors associated with CD among adolescents and provides a basis for future research and the development of contextually appropriate prevention and intervention strategies.

THEORETICAL FRAMEWORK

This study was informed by social learning theory (SLT), Cognitive behavioral theory and parenting styles theory.

Social Learning Theory (SLT)

Social Learning Theory (SLT), developed by Bandura (1977), explains that behaviour is learned through observation, imitation, modelling, and reinforcement within an individual's social environment. The theory proposes that adolescents may acquire and maintain aggressive, antisocial, and rule-violating behaviours by observing and imitating significant others, including parents, siblings, peers, and other social models. In the context of conduct disorder (CD), sociodemographic characteristics such as family type, family size, parental education, occupation, income bracket, age, and gender may shape the social environments and learning experiences to which adolescents are exposed. For example, family structure, socioeconomic circumstances, parental education and occupation may influence parenting practices, supervision, availability of resources, and exposure to behavioural models, while peer and family interactions may reinforce or discourage antisocial behaviours. The theory therefore provides a useful framework for examining how adolescents' social and family circumstances may be associated with CD, while recognizing that individual cognitive and developmental factors also influence whether observed behaviours are adopted and expressed. Thus, SLT supports the view that understanding adolescents' sociodemographic environments is important in identifying factors associated with the development and persistence of conduct-related behaviours.

Cognitive Behavioral Theory

Cognitive Behavioral Theory (CBT) provides a useful framework for understanding Conduct Disorder (CD) by explaining how adolescents' thoughts, interpretations, emotions, and behaviours interact to influence behavioural outcomes. Developed from the work of Albert Ellis and Aaron Beck, CBT proposes that maladaptive behaviours are influenced by distorted or irrational patterns of thinking, including hostile attribution, externalization of blame, and justification of aggression (Beck, 1976; David et al., 2018). Among adolescents with CD, such cognitive distortions may contribute to persistent aggression, rule-breaking, and antisocial behaviours by allowing negative actions to be interpreted as reasonable or justified (Barriga et al., 2018; Nas et al., 2020). In the context of this study, CBT provides a theoretical basis for examining how sociodemographic and family-related characteristics, such as gender, age, family structure, parental education, and socioeconomic circumstances, may interact with adolescents' cognitive and behavioural patterns to influence CD. The theory therefore supports the importance of identifying characteristics associated with CD to inform early identification, prevention, and appropriate psychosocial interventions among adolescents.

Parenting Styles Theory

Parenting Styles Theory was developed by Baumrind to explain how different patterns of parental responsiveness and control influence children's development and behaviour. The theory identifies four major parenting styles: authoritative, authoritarian, permissive, and neglectful. Authoritative parenting combines warmth, communication, clear expectations, and consistent discipline and is generally associated with positive psychosocial adjustment, whereas authoritarian parenting emphasizes strict control with limited responsiveness and may contribute to aggression and defiance. Permissive parenting is characterized by high responsiveness but limited control, potentially resulting in poor self-regulation and difficulty following rules, while neglectful parenting involves low responsiveness and low parental control and has been associated with increased behavioural difficulties (Baumrind, 1966, 1991; Steinberg, 2001). In the context of this study, the theory provides a framework for understanding how family characteristics, including family structure, parental education, and socioeconomic circumstances, may influence adolescents' behavioural development and contribute to the occurrence of Conduct Disorder. It therefore supports the examination of family-related sociodemographic factors in identifying adolescents who may be at increased risk of CD.

Sociodemographic Characteristics Associated with Conduct Disorder

Sociodemographic Characteristics Associated with Conduct Disorder: Sociodemographic characteristics play an important role in understanding the development and expression of Conduct Disorder (CD) among

adolescents. Evidence indicates that factors such as age, gender, socioeconomic circumstances, family structure, parental characteristics, and family support are associated with behavioural difficulties. Early-onset conduct problems are particularly associated with more persistent and severe antisocial behaviour (Farrington, 2013; Loeber & Farrington, 2010), while adolescents from disadvantaged socioeconomic backgrounds may experience greater family stress, inadequate parental supervision, and exposure to adverse environments that increase vulnerability to CD (Dodge et al., 2016; Reiss, 2010). Studies have also consistently reported higher levels of CD-related behaviours among boys, although girls may present differently, including through relational forms of aggression (Broidy et al., 2023; Predescu & Sipos, 2023). African studies similarly demonstrate associations between CD and factors such as gender, age, socioeconomic status, family structure, and parenting practices (Obimakinde et al., 2019; Namu, 2022). These findings highlight the importance of considering adolescents' demographic and family contexts when identifying those at increased risk of CD and developing targeted prevention and early intervention strategies.

Study Methodology

The study employed a quantitative analytical approach to examine the sociodemographic characteristics associated with Conduct Disorder (CD) among adolescents in selected secondary schools in Ruiru Sub-County, Kiambu County, Kenya. The study was conducted at Ruiru Kihunguro Secondary School and Devki Secondary School, targeting adolescents in Forms 3 and 4. Data were collected using the Conduct Disorder Scale (CDS) and a Sociodemographic Questionnaire, which captured information on participants' age, gender, family structure, socioeconomic characteristics, parental education, and other relevant sociodemographic factors. During the baseline assessment, the CDS was administered to assess CD symptoms and severity, after which eligible participants completed the Sociodemographic Questionnaire. Data were coded, entered, cleaned, and analysed using IBM SPSS Statistics Version 29. Descriptive statistics were used to summarise the study variables, while Pearson correlation analysis was used to determine the strength and direction of the relationship between continuous sociodemographic characteristics and CD scores. Appropriate statistical tests were applied to categorical sociodemographic characteristics, and multiple linear regression analysis was conducted to determine the independent contribution of selected sociodemographic characteristics to CD scores. The regression model was specified as $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon$, where Y represents the Conduct Disorder score, β_0 represents the constant, X_1 , X_2 , and X_3 represent the selected sociodemographic characteristics, β_1 , β_2 , and β_3 represent their respective regression coefficients, and ϵ represents the error term. Statistical significance was assessed at the 5% significance level ($p < .05$). Before data collection, the researcher obtained the necessary university approvals and a research permit from the National Commission for Science, Technology and Innovation (NACOSTI), as well as permission from the relevant education authorities and the administrations of the selected schools. Informed consent was obtained from parents or guardians, while assent was obtained from the participating adolescents before data collection. Participation was voluntary, and confidentiality and privacy of participants' information were maintained throughout the study. The present journal analysis specifically focused on Objective Two, which examined the sociodemographic characteristics associated with Conduct Disorder among adolescents, using baseline sociodemographic information and CD scores.

RESULTS AND DISCUSSION

The Sociodemographic Characteristics Associated with CD Among Adolescents

The study sought to examine the sociodemographic characteristics associated with CD among adolescents in selected secondary schools in Ruiru Subcounty, Kenya. Sociodemographic variables including age, gender, family type, social status, parental education, school, family structure, were analyzed using descriptive statistics. The association between each sociodemographic characteristic and CD was assessed using appropriate inferential statistical tests, including the Chi-square test for categorical variables and the independent samples t-test for continuous variables where applicable. The findings are presented in table below.

Table 1: Demographic Characteristic of the Respondents (n=90)

Item	Category	Frequency(f)	Percentage (%)
Gender	Male	57	63.3%
	Female	33	36.7%
Age	15-16 years	9	10.0%
	17-19years	81	90.0%
Class	Form 3	51	56.7%
	Form 4	39	43.3%
Family Structure	Both Parents	35	38.9%
	Mother only	49	54.4%
	Father only	3	3.3%
	Guardian or Extended Family	2	2.2%
	Other	1	1.1%

Table 1 presents the socio-demographic characteristics of the 90 respondents who participated in the study. Of the respondents, 57 (63.3%) were male, while 33 (36.7%) were female. This indicates that the majority of the participants in the study were male. The findings indicate that although males constituted the majority of the sample, the inclusion of a substantial proportion of female respondents provided a reasonably balanced gender representation, which is important given the higher prevalence of conduct disorder among males.

Regarding age, the majority of the respondents, 81 (90.0%), were aged between 17 and 19 years, while only 9 (10.0%) were aged between 15 and 16 years. This suggests that most participants were in the older adolescent age group. This shows the representation of adolescents in different age groups in the study. In terms of class level, 51 (56.7%) of the respondents were in form three, whereas 39 (43.3%) were in form four. This shows that form three students constituted a slightly larger proportion of the study sample than form four students. The findings indicate that the sample was predominantly composed of older adolescents in forms three and four, providing a suitable representation of students within the target age and educational levels for the study. Concerning family structure, more than half of the respondents, 49 (54.4%), lived with their mothers only. This was followed by 35 (38.9%) respondents who lived with both parents. A small proportion of respondents lived with their fathers only (3.3%), guardians or extended family members (2.2%), while only 1 (1.1%) respondent reported another family arrangement. These findings indicate that a considerable proportion of the respondents came from single-mother households, while relatively few were living with only their fathers, guardians, or under other family arrangements.

Comparison of Conduct Disorder Scores by Gender

An independent t-test was conducted to determine whether there were differences in conduct disorder scores between male and female respondents. The mean conduct disorder scores for males and females were compared, and the results are presented in Table 2.

Table 1: Comparison of Conduct Disorder Scores by Gender (n=90)

Gende r	n	Mean	SD	t	df	p-value
Male	57	93.37	3.844			

Female	33	88.18	3.548	6.34 2	88	<.001
--------	----	-------	-------	-----------	----	-------

As indicated in table 2, the analysis revealed a statistically significant difference in CD scores between male and female adolescents, $t(88) = 6.342$, $p < .001$. Male adolescents ($n = 57$) had a significantly higher mean CD score ($M = 93.37$, $SD = 3.84$) than female adolescents ($n = 33$; $M = 88.18$, $SD = 3.55$). The findings implied that boys in secondary schools in Ruiru Subcounty reported significantly higher levels of CD symptoms compared to girls. The finding is consistent with the World Health Organization (WHO, 2020), which reported that CD is more common among boys than girls. Similarly, Erskine et al. (2022) reported a higher prevalence of CD among males than females, while Omwenga et al. (2024) and Pessah (2023) found significantly higher levels of CD among male secondary school students in Kenya. The observed gender difference can be explained through Bandura's Social Learning Theory (1986), which proposes that adolescents learn behaviours through observation, imitation, and reinforcement. Boys may experience greater exposure to aggressive or externalizing behaviors within peer and social environments, which may reinforce conduct-related behaviours. These findings suggest that gender-sensitive approaches may be important when designing school-based screening and early support programmes for adolescents exhibiting conduct-related difficulties.

Comparison of Conduct Disorder Scores by Age

An independent samples t-test was conducted to compare the mean conduct disorder scores between respondents aged 15–16 years and those aged 17–19 years. The results were as shown in table 3.

Table 2: Comparison of Conduct Disorder Scores by Age group (n=90)

Age	n	Mean	SD	t	df	p-value
15-16 years	9	90.22	4.206			
17-19 years	81	91.60	4.521	-0.876	88	0.384

The findings presented in table 3, show that respondents aged 15–16 years ($n = 9$) had a mean CD score of 90.22 ($SD = 4.208$), while those aged 17–19 years ($n = 81$) had a slightly higher mean score of 91.60 ($SD = 4.521$). However, the mean difference is not statistically significant, $t(88) = -0.876$, $p = .384$. This implies that the age on an individual does not influence the conduct disorder scores. Hence, students age is not associated with differences in conduct disorder levels.

Comparison of Conduct Disorder scores by Class Level

Table 3: Comparison of Conduct Disorder scores by Class Level (n=90)

Class	n	Mean	SD	t	df	p-value
Form 3	51	92.02	4.743			
Form 4	39	90.74	4.076	1.343	88	0.183

An independent samples t-test was conducted to compare conduct disorder scores between form 3 and form 4 students. The results in table 4, indicate that form 3 students had a slightly higher mean conduct disorder score ($M = 92.02$, $SD = 4.74$) than form 4 students ($M = 90.74$, $SD = 4.08$). However, the difference was not statistically significant, $t(88) = 1.343$, $p = .183$. These findings indicate that class level was not significantly associated with conduct disorder scores among adolescents in the baseline study sample. Therefore, the study failed to find sufficient evidence that CD scores differed between form 3 and form 4 students. These findings suggest that, within the mid-to-late adolescent age range examined, CD symptoms may not vary substantially according to age or class level. The findings can be understood from the perspective of Beck's Cognitive Behavioural Theory, which emphasises the role of established cognitive patterns and behavioural responses in shaping behaviour. Once maladaptive patterns have developed, chronological age or

progression from one class level to another may not necessarily result in substantial changes in conduct-related behaviours without targeted intervention. Therefore, the findings highlight the importance of assessing behavioural difficulties based on individual needs rather than assuming that age or class level alone determines the severity of CD.

Association between Family Structure and Conduct Disorder Score

A one-way analysis of variance (ANOVA) was conducted to determine whether CD scores differed across the various family structure categories.

Table 4: Association between family structure and conduct disorder

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	16.99	4	4.248	0.203	0.936
Within Groups	1775.4	85	20.887		
Total	1792.4	89			

The results in table 5 indicated that there was no statistically significant difference in CD scores among adolescents from different family structures, $F(4, 85) = 0.203, p = .936$. These findings suggest that family structure was not significantly associated with CD scores among the adolescents in the baseline study sample. Therefore, the study failed to find sufficient evidence that CD scores varied according to family structure. The present findings imply that family composition alone may not be sufficient to explain CD without considering other family and environmental factors.

The absence of a significant relationship in the present study may indicate that family structure alone does not sufficiently explain variations in conduct-related behaviors. This interpretation is consistent with Baumrind's Parenting Styles Theory (1991), which emphasizes the importance of parenting practices, including warmth, control, communication, and supervision, rather than family structure alone.

Relationship between Household Characteristics and Conduct Disorder Scores

To further examine the sociodemographic characteristics associated with CD, Pearson's product-moment correlation analysis was conducted to determine the relationship between adolescents' CD baseline scores and selected household characteristics, namely the number of rooms in the household and the number of siblings. The strength and direction of the relationships were assessed using Pearson's correlation coefficient (r), while statistical significance was determined at the 0.05 level.

Table 6: Relationships between Conduct Disorder and number of rooms and siblings.

Variable	r	p-value	n	Interpretation
Number of rooms	0.265	0.012	90	Significant positive correlation
Number of siblings	0.088	0.407	90	No significant correlation

From the results in table 6, Pearson's product-moment correlation analysis showed a statistically significant positive correlation between the number of rooms in the household and CD baseline scores ($r = .265, p = .012, n = 90$). Although the relationship was weak, the findings indicate that adolescents from households with a greater number of rooms tended to have slightly higher CD scores. In contrast, there was no statistically significant relationship between the number of siblings and CD baseline scores ($r = .088, p = .407, n = 90$). This suggests that the number of siblings was not significantly associated with CD scores among the adolescents included in the study.

Association between Parents' Level of Education and Conduct Disorder Scores

A one-way analysis of variance (ANOVA) was conducted to determine whether adolescents' CD scores differed according to their parents' level of education.

Table 7: Association between mothers' level of education and CD Scores

	Sum of Squares	df	Mean Square	F	Sig
Between Groups	131.1	4	32.78	1.653	0.169
Within Groups	1586.1	80	19.83		
Total	1717.2	84			

Table 8: Association between Fathers' level of education and CD Scores

	Sum of Squares	df	Mean Square	F	Sig
Between Groups	66.6	4	16.7	0.85	0.505
Within Groups	608.4	31	19.6		
Total	675.0	35			

The analysis in table 7 and 8 shows that there was no statistically significant difference in CD scores across the different levels of mothers' education, $F(4, 84) = 1.653$, $p = .169$. This indicates that mothers' level of education was not significantly associated with adolescents' conduct disorder scores. Similarly, there was no statistically significant difference in conduct disorder scores across the different levels of fathers' education, $F(4, 35) = 0.849$, $p = .505$. These findings suggest that fathers' level of education was also not significantly associated with conduct disorder scores among the adolescents in the study. The study found no significant association between either mother's or father's educational level and CD scores. Parental educational attainment alone did not therefore significantly predict CD in the present study.

The finding regarding parental education is consistent with the view that socioeconomic circumstances are complex and that a single socioeconomic indicator may not adequately capture the environmental conditions influencing adolescent behaviour. Previous studies have linked socioeconomic disadvantage, family stress, parenting, and environmental conditions with behavioral difficulties (Dodge et al., 2016; Reiss, 2010). The present findings therefore suggest that parental educational attainment alone may not be a sufficient predictor of CD among adolescents. From the perspective of Social Learning Theory, environmental influences may affect behavior through social interactions, modelling, and reinforcement rather than through socioeconomic characteristics in isolation.

Multiple Linear Regression Analysis of Sociodemographic Characteristics Predicting Conduct Disorder

To determine whether the selected continuous sociodemographic characteristics significantly predicted CD scores, a multiple linear regression analysis was conducted. The dependent variable was the baseline CD score, while age, number of rooms, and number of siblings were entered as predictor variables. The model summary and ANOVA results are presented in table 9.

Table 9: Multiple linear Regression Model predicting Conduct Disorder Scores from continuous Sociodemographic characteristics.

Statistic	Value
R	0.280

R ²	0.078
Adjusted R ²	0.046
Standard Error of Estimate	4.383

Table 10: ANOVA results

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	140.216	3	46.739	2.433	.070 ^b
Residual	1652.184	86	19.211		
Total	1792.400	89			

The results in table 9 and 10 shows that the multiple regression model yielded an R of .280 and an R² of .078, indicating that age, number of rooms, and number of siblings jointly explained 7.8% of the variation in baseline CD scores. The adjusted R² was .046, indicating that the model explained 4.6% of the variance after adjustment for the number of predictors. The overall regression model was not statistically significant, $F(3, 86) = 2.433$, $p = .070$. Therefore, the three continuous sociodemographic characteristics, when considered jointly, did not significantly predict conduct disorder scores at the 5% level of significance.

Individual Predictors

Table 11: Regression Coefficients for Continuous Sociodemographic predictors of Conduct Disorder

Predictor	B	β	t	p-value
Age	0.546	0.037	0.34	0.735
Number of rooms	0.858	0.253	2.359	0.021
Number of siblings	0.342	0.087	0.834	0.406

Table 11 shows that examination of the individual predictors showed that age was not a significant predictor of CD score ($\beta = .037$, $p = .735$). Similarly, number of siblings was not a significant predictor ($\beta = .087$, $p = .406$). However, number of rooms was a significant positive individual predictor of CD score ($\beta = .253$, $p = .021$). This suggests that, after controlling for age and number of siblings, variation in the number of rooms was associated with variation in CD scores. The finding suggests that the selected sociodemographic characteristics, when considered together, provide limited explanation of variations in CD scores. This supports the understanding that CD is a multifactorial behavioural condition, influenced by the interaction of individual, family, parenting, peer, and environmental factors rather than demographic characteristics alone. Dodge et al. (2016) highlighted the contribution of family stress, parental supervision, socioeconomic disadvantage, and adverse environments to conduct problems, while Reiss (2010) emphasized the role of environmental and socioeconomic conditions. Obimakinde et al. (2019) similarly reported relationships between socioeconomic circumstances, parenting-related factors, and behavioural difficulties among adolescents. Overall, the findings suggest that gender and selected household characteristics may be relevant to CD, but sociodemographic characteristics alone do not adequately explain Conduct Disorder among adolescents. This underscores the need for comprehensive assessment that considers the broader social, family, parenting, cognitive, and peer environments of adolescents.

SUMMARY OF THE STUDY

Sociodemographic Characteristics Associated with Conduct Disorder

The study examined the association between selected sociodemographic characteristics and Conduct Disorder (CD) among adolescents in selected secondary schools in Ruiru Sub-County, Kiambu County, Kenya. The findings showed that gender was significantly associated with CD, with male adolescents

recording higher CD scores than females, suggesting a greater burden of conduct-related symptoms among boys. However, age and class level were not significantly associated with CD, indicating that conduct-related symptoms did not differ substantially across the adolescent age groups or between Form 3 and Form 4 students. Family structure also showed no statistically significant association with CD, suggesting that the type of household in which an adolescent lived, whether with both parents, one parent, or other caregivers, did not independently explain variations in CD scores. Among household characteristics, the number of rooms was positively associated with CD scores, whereas the number of siblings was not. Similarly, maternal and paternal educational levels were not significantly associated with CD, indicating that parental educational attainment alone may not adequately explain differences in adolescents' conduct-related behaviours. Although the multiple regression analysis showed that age, number of rooms, and number of siblings did not significantly predict CD when considered jointly, the individual effect of number of rooms remained significant. Overall, the findings indicate that gender and certain household characteristics may be relevant to CD, but the examined sociodemographic factors provide limited explanation of variations in conduct disorder when considered collectively. The findings support the view that CD is a multifactorial condition shaped by the interaction of individual, family, parenting, peer, psychological, and environmental factors. Therefore, identification and management of CD among adolescents should extend beyond demographic characteristics to include broader psychosocial and environmental assessments, while school-based screening and early-support programmes may benefit from particular attention to adolescents displaying elevated conduct-related symptoms, especially boys.

CONCLUSIONS

Based on the summary, the study makes the following conclusions;

The study concludes that Conduct Disorder (CD) is an important behavioural and mental health concern among adolescents in selected secondary schools in Ruiru Sub-County, Kiambu County, Kenya, with a prevalence of 26.98%. Although the majority of adolescents were unlikely to have CD, a substantial proportion presented with conduct-related difficulties requiring attention. Regarding sociodemographic characteristics, gender and number of rooms were identified as significant individual factors associated with CD scores, with male adolescents exhibiting higher CD scores, while age, number of siblings, family structure, and parental educational levels showed limited relationships with CD. However, the combined regression model involving age, number of rooms, and number of siblings did not significantly predict CD, suggesting that sociodemographic characteristics alone provide limited explanation for variations in conduct-related behaviours. The findings therefore indicate that CD is likely influenced by the interaction of broader individual, family, psychological, social, and environmental factors. Overall, the study highlights the importance of considering adolescents' demographic and household contexts alongside other psychosocial factors when developing strategies for early identification, prevention, and management of CD in school settings.

RECOMMENDATIONS FOR POLICY

The following recommendations are drawn;

The findings of this study highlight the need for policies that strengthen early identification and psychosocial support for adolescents with conduct-related difficulties in secondary schools. Given the observed prevalence of Conduct Disorder and the higher CD scores among male adolescents, the Ministry of Education should strengthen school-based mental health and counselling services, including access to appropriately trained counsellors and clear referral pathways for adolescents requiring specialised psychological support. Schools should also be supported to implement systematic approaches for identifying persistent behavioural difficulties and distinguishing them from routine disciplinary concerns.

The Ministry of Education, in collaboration with the Ministry of Health, should further strengthen linkages between schools and mental health services to facilitate timely assessment, referral, intervention, and follow-up. Teacher capacity-building programmes should equip teachers with knowledge of adolescent mental health, behavioural difficulties, positive discipline, early identification, and appropriate referral procedures.



Policies should also encourage collaboration among schools, parents, counsellors, clinical psychologists, and health services while safeguarding adolescents' confidentiality and privacy. These measures would support early intervention and ensure that conduct-related difficulties are addressed through appropriate psychosocial and mental health approaches rather than disciplinary measures alone.

REFERENCES

1. American Psychiatric Association. (2025). Diagnostic and statistical manual of mental disorders. American Psychiatric Association. <https://psychiatryonline.org/doi/book/10.1176/appi.books.9780890425787>
2. Ayano, G., Abraha, M., Tsegay, L., & Gizachew, Y. (2024). Umbrella review of the global prevalence of Conduct Disorder in children and adolescents. *The Psychiatric Quarterly*, 95(1), 173–183. <https://doi.org/10.1007/s11126-023-10060-9>
3. David, D., Cristea, I., & Hofmann, S. G. (2018). Why cognitive behavioral therapy is the current gold standard of psychotherapy. *Frontiers in Psychiatry*, 9, 4. <https://doi.org/10.3389/fpsyt.2018.00004>
4. Dodge, K. A., Price, J. M., Bachorowski, J.-A., & Newman, J. P. (1990). Hostile attributional biases in severely aggressive adolescents. *Journal of Abnormal Psychology*, 99(4), 385–392. <https://doi.org/10.1037/0021-843X.99.4.385>
5. Emmanuel, S. O., & Ogundokun, M. O. (2023). Effect of emotional intelligence training and cognitive restructuring therapy on self-esteem of secondary school students experiencing academic failure in Ibadan, Oyo State, Nigeria. *Journal of Humanities Therapy*, 14(1), 75–104.
6. Erskine, H. E., Norman, R. E., Ferrari, A. J., Chan, G. C. K., Copeland, W. E., Whiteford, H. A., & Scott, J. G. (2016). Long-Term Outcomes of Attention-Deficit/Hyperactivity Disorder and Conduct Disorder: A Systematic Review and Meta-Analysis. *Journal of the American Academy of Child and Adolescent Psychiatry*, 55(10), 841–850.
7. Ezawa, I. D., & Hollon, S. D. (2023). Cognitive restructuring and psychotherapy outcome: A Meta-Analytic Review. *Psychotherapy (Chicago, Ill.)*, 60(3), 396–406. <https://doi.org/10.1037/pst0000474>
8. Fairchild, G., Hawes, D. J., Frick, P. J., Copeland, W. E., Odgers, C. L., Franke, B., Freitag, C. M., & De Brito, S. A. (2019). Conduct Disorder. *Nature Reviews. Disease Primers*, 5(1), 43. <https://doi.org/10.1038/s41572-019-0095-y>
9. Frick, P. J. (2022). Some critical considerations in applying the construct of psychopathy to research and classification of childhood disruptive behavior disorders. *Clinical Psychology Review*, 96, 102188. <https://doi.org/10.1016/j.cpr.2022.102188>
10. Geraldo, M., & Mabulay, P. (2024). Parenting styles and Conduct Disorder in adolescents: examining the impact of parenting approaches on adolescent behavioral outcomes. A Journal Analysis Presented as a Final Requirement for Clinical Psychology.
11. Jakobsson Støre, S., Van Zalk, N., Granander Schwartz, W., Nilsson, V., & Tillfors, M. (2024). The relationship between social anxiety disorder and adhd in adolescents and adults: A Systematic Review. *Journal of Attention Disorders*, 28(9), 1299–1319. <https://doi.org/10.1177/10870547241247448>
12. Junewicz, A., & Billick, S. B. (2020). Conduct Disorder: Biology and Developmental Trajectories. *The Psychiatric Quarterly*, 91(1), 77–90. <https://doi.org/10.1007/s11126-019-09678-5>
13. Kruse, K., & Malas, N. (2024). Disruptive impulse control and behavior disorders: Oppositional defiant disorder and Conduct Disorder. Springer International Publishing. <http://ouci.dntb.gov.ua/en/works/4vWZYWVI/>
14. Luna, P., Guerrero, J., Rodrigo-Ruiz, D., Losada, L., & Cejudo, J. (2020). Social competence and peer social acceptance: Evaluating effects of an educational intervention in adolescents. *Frontiers in psychology*, 11, 1305
15. Namu, C. (2022). Parenting practices and their influence on adolescent behavior in Nairobi County, Kenya [Univeristy of Nairobi].
16. Nas, Z., Riese, H., van Roon, A. M., & Rijdsdijk, F. V. (2020). Higher anxiety is associated with lower cardiovascular autonomic function in female twins. *Twin Research and Human Genetics: The Official Journal of the International Society for Twin Studies*, 23(3), 156–164. <https://doi.org/10.1017/thg.2020.47>



17. Obimakinde, A. M., Omigbodun, O., Adejumo, O., & Adedokun, B. (2019). Parenting styles and socio-demographic dynamics associated with mental health of in-school adolescents in Ibadan, south-west Nigeria. *Journal of Child and Adolescent Mental Health*, 31(2), 109–124. <https://doi.org/10.2989/17280583.2019.1662426>
18. Sadler, K., Vizard, T., Ford, T., Marcheselli, N. P., Mandalia, D., Davis, J., Brodie, E., Forbes, N., & Goodman, A. (2017). *Mental health of children and young people in England, 2017*. London: NHS Digital.
19. Tillem, S., Conley, M. I., & Baskin-Sommers, A. (2022). Conduct Disorder symptomatology is associated with an altered functional connectome in a large national youth sample. *Development and Psychopathology*, 34(4), 1573–1584. <https://doi.org/10.1017/S0954579421000237>
20. Tonyali, A., Göker, Z., & Üneri, O. Ş. (2019). Psychosocial interventions in the treatment of child and adolescent Conduct Disorder. *Psikiyatride Güncel Yaklaşımlar*, 11(3), 284–303. <https://doi.org/10.18863/pgy.425225>.