

The Effect of Applied Behaviour Analysis in Mitigating Disruptive Behaviour Disorders among Adolescents in Lagos State

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Abstract

This study investigated the influence of socio-demographic factors and the effectiveness of Applied Behaviour Analysis (ABA) on Disruptive Behaviour Disorder (DBD) among in-school adolescents in Lagos State, Nigeria. A cross-sectional survey was conducted with 655 students, while a Randomised Controlled Trial design involving 64 participants was used to evaluate the effect of the ABA intervention. Participants were randomly assigned to experimental and control groups. The findings revealed that socio-demographic variables jointly explained 7.3% of the variance in DBD, and sex and school type had a significant independent influence on DBD. Age, class, religion, family size, family type, and living arrangement were not significant predictors of DBD. The ABA intervention led to a significant reduction in DBDs from baseline to endline among participants. There was a statistically significant difference in disruptive behaviour between the control and experimental groups when the pretest measure was placed under control. Disruptive behaviour decreased significantly among participants in the experimental group. This implied that ABA significantly decreased disruptive behaviour among in-school adolescents. The study concludes that socio-demographic characteristics shape adolescent behavioural outcomes in varying ways, and that ABA is an effective strategy for reducing disruptive tendencies in school settings.

Keywords: Applied Behaviour Analysis, Disruptive behaviour, Adolescents, Sex and School type.

Introduction

According to the American Psychiatric Association (2020), disruptive behaviour refers to behaviour that frequently threatens or disturbs others or violates social and community norms. While often used in the context of children, this term can also apply to adult actions when they disrupt expected behaviour patterns. Disruptive behaviour among children and adolescents is one of the most common behavioural challenges encountered in educational and social contexts. These behaviours are characterised by persistent patterns of actions such as defiance, aggression, violation of rules, disregard for authority, and difficulties with self-regulation. Unlike occasional misbehaviour, disruptive behaviour occurs frequently, is intense, and often interferes with learning, classroom management, and healthy peer and teacher relationships (VandenBos, 2015). Scholars have consistently highlighted that disruptive behaviour is not a single action but a broad category of behaviours that challenge authority and disrupt social norms in school and community settings (Woodard & Davis, 2019). These behaviours may include persistent disobedience, quarrelling, fighting, vandalism, truancy, disrespect for teachers, bullying, and defiance of school rules (Konrad et al., 2022). Such behavioural tendencies, if unaddressed, often escalate into more serious challenges, affecting both the academic achievement and the social development of adolescents.

The prevalence of disruptive behaviour varies across regions and cultures. For example, research shows that disruptive behaviours are more frequently reported among adolescents in urban areas, where social pressures, peer influence, and overcrowded schools increase the risk of behavioural challenges (Mohammadi et al., 2021). Studies in Nigeria also confirm that disruptive behaviour among adolescents

is common, with prevalence rates ranging from 9% to over 15.7% in different parts of the country (Kumuyi et al., 2021; Ojuope & Ekundayo, 2020; Akpan et al., 2020; Ojo & Ojo, 2026). In Lagos State, teachers and school administrators frequently report classroom disruptions that make teaching difficult and compromise the learning environment.

One major form of disruptive behaviour observed among adolescents is conduct-related behaviour. This includes repeated aggression, destruction of property, truancy, bullying, and violation of established school rules and social norms (Matthys & Lochman, 2017; Mohan et al., 2023). Such behaviours are not simply occasional mischief but are often persistent patterns that interfere with learning and create safety concerns in school environments. Studies across different countries show that adolescents who frequently display conduct-related behaviours are at higher risk of academic failure, peer rejection, and social maladjustment.

The prevalence of conduct-related disruptive behaviour differs across regions. For instance, Mohammadi et al. (2021) reported an 8% global prevalence, while Erskine et al. (2017) earlier reported 6%. In Nigeria, prevalence estimates vary. Kumuyi et al. (2021) found a 9.6% rate of severe conduct-related behaviour among adolescents in Southwestern Nigeria, while Ojuope and Ekundayo (2020) reported 14.5% in another study. Similarly, Akpan et al. (2020) reported 9.8% among secondary school adolescents in Southern Nigeria. These figures show that conduct-related behaviour is not only widespread but also a pressing concern in both public and private schools (Ojo et al., 2025).

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Another common form of disruptive behaviour is oppositional or defiant behaviour, which is marked by persistent disobedience, irritability, stubbornness, argumentativeness, and deliberate refusal to comply with authority (Doepfner et al., 2020; Neumann et al., 2023). Adolescents who display oppositional tendencies often challenge teachers, quarrel with peers, procrastinate, and refuse to follow rules (Ojo et al., 2026). Such behaviours disrupt classroom learning and create tension between students and authority figures. Arinde et al. (2023) note that oppositional behaviours can significantly affect educational attainment, as they reduce cooperation and increase conflict in school settings. The prevalence of oppositional behaviour varies globally. Cross-national studies estimate prevalence rates of between 1% and 11% (APA, 2022). In Nigeria, findings are similar. Akpan et al. (2020) found a prevalence of 9.8% among primary school children, while Animashaun et al. (2025) found a prevalence of 16.6% among in-school adolescents in Lagos, Nigeria. Arinde et al. (2024) also found that oppositional behaviours were often accompanied by other disruptive tendencies, such as inattentiveness and aggression, which jointly affected academic performance among adolescents.

Sociodemographic factors such as sex, age, school type, and family background play an important role in the development and expression of disruptive behaviours. Research indicates that males are more likely than females to engage in behaviours such as aggression, rule-breaking, and open defiance (Konrad et al., 2022; Lawal et al., 2025; Ojo et al., 2025). Similarly, adolescents from overcrowded homes, large families, or those experiencing economic hardship may demonstrate higher rates of disruptive behaviour compared to their peers from more stable environments (Sahi et al., 2023; Ojo et al., 2025). School type also matters: students in private schools may encounter conditions that foster disruptive tendencies more than those in public schools (Animashaun et al., 2025). Adolescence could be said to be a transition period from childhood into adulthood occurring between 10-19 years. In this period, children undergo speedy or quick transformation physically, cognitively and socially. In a recent time, adolescents who are in the transitional phase are mostly faced with behavioural problems such as conduct disorders (Miao et al., 2025; Mastorci et al., 2024), and this behaviour disorder is associated with the adverse experiences they were exposed to during their childhood stage.

Considering the critical developmental stage of adolescence and the socio-cultural dynamics in Lagos State, it is essential to evaluate the applicability and effectiveness of ABA in managing DBDs. Furthermore, understanding how socio-demographic characteristics influence treatment outcomes can inform culturally relevant and inclusive intervention programmes in schools. One of the promising approaches to address disruptive behaviour is Applied Behaviour Analysis (ABA). ABA focuses on using principles of reinforcement, modelling, and structured strategies to encourage positive behaviours while reducing negative ones (Cooper et al., 2020). Techniques like positive reinforcement, differential reinforcement, and functional communication training have been shown to improve behaviour among adolescents (Corr et al., 2025; Chung et al., 2024). However, in Nigeria, ABA is not yet widely used in schools, and very little research has tested its effectiveness within our own cultural and social context.

ABA is the systematic application of behavioural principles, including reinforcement, modelling, and environmental adjustments, to promote positive behaviours and reduce maladaptive ones (Cooper et al., 2020). By employing strategies such as positive reinforcement, functional communication training, and differential reinforcement, ABA provides a structured and evidence-based method for managing behavioural difficulties in educational settings. In Nigerian

schools, however, the application of ABA remains limited and under-researched, especially in relation to socio-demographic factors that may influence behavioural outcomes. Disruptive behaviour among in-school adolescents in Lagos State presents a growing challenge to educators, parents, and policymakers. These behaviours hinder academic performance, create tension in classrooms, weaken peer relationships, and compromise the authority of teachers. In the long term, adolescents who frequently display disruptive behaviours are at greater risk of experiencing academic failure, social exclusion, and adjustment problems in adulthood (Lin & Guo, 2024).

Despite these risks, there are few structured behavioural interventions tailored to the Nigerian educational system. Applied Behaviour Analysis (ABA) has been used successfully in other contexts to reduce disruptive behaviour, but its systematic application in Nigerian schools is still rare. Furthermore, the extent to which socio-demographic factors such as age, sex, and family background shape both the occurrence of disruptive behaviour and the outcomes of behavioural interventions has not been adequately studied within the local context. This study, therefore, seeks to bridge this gap by investigating the sociodemographic factors and the effect of Applied Behaviour Analysis on disruptive behaviour among in-school adolescents in Lagos State. It was hypothesized that there would be a significant difference between the pre-test and post-test scores, such that participants would report significantly lower levels of disruptive behaviour after exposure to the treatment; Participants in the experimental group will significantly score lower on the measure of disruptive behaviour compared to participants in the control group. Sociodemographic characteristics (age, sex, class, type of family) will significantly, jointly, and independently predict disruptive behaviour among in-school adolescents in Lagos State.

Methods

This study adopted a Randomised Controlled Trial (RCT) and a cross-sectional design. The cross-sectional design was used to collect quantitative data from participants across diverse ages at the same point in time while the RCT was used to evaluate the effectiveness of Applied Behaviour Analysis (Reinforcement principles ABA) on disruptive behaviour among in-school adolescents. The independent variables were the sociodemographic factors (age, sex, class, Religion, Family size, family type, school type and living with), while the dependent variable is disruptive behaviour. Participants who met the inclusion criteria were randomly assigned to either the intervention group (receiving ABA techniques) or the control group (receiving no ABA during the study period). This design allowed for a rigorous comparison between the two groups and provided stronger evidence for causal inference. Reinforcement principles serves as the experimental variable. In this regards participants were randomly assigned into the experimental group (receive reinforcement principles) and control group (Receive no reinforcement principles).

The research was conducted within Education district 1, The study targeted adolescents aged 12–18 attending public and private school in Lagos state education district I. Krejcie and Morgan's (1970) sample size determination was used to determine the sample size for the cross-sectional study. It was estimated that Education District I had a population of over 500,000; the sample size based on Krejcie and Morgan's table was 384. A projected 10% attrition was added, that is, (39+384), making a total of 423, but it was increased to 655 to accommodate disparity in the response rate and incomplete responses and enhance the strength of generalisation of the research outcome and decrease chances for bias.

The cross-sectional study employed a multi-stage sampling technique

consisting of three stages to select in-school adolescents across secondary schools in Lagos State Education District I. Education District I had 100 public and 201 private schools. In the first stage, the schools were stratified into two categories: public and private schools. This stratification ensured that both types of schools were adequately represented in the sample. From each stratum (public and private) within Education district one, schools were randomly selected using a table of random numbers to maintain fairness and reduce selection bias. Afterwards, a convenience sampling technique was used to administer the research instruments to the participants who met the inclusion criteria. A total number of 655 students (Male 50.2%, Female 49.8%) participated in the study, with age (Mean = 14.58, Std = 1.78) and family size (Mean = 5.78, Std = 1.99).

The sample size for the intervention study was determined using G*Power version 3.1.9.7. An a priori power analysis was conducted as an independent sample t-test with the following parameters: a large effect size (Cohen's $d = 0.80$) and an alpha level of 0.05 and a power ($1 - \beta$) of 0.95. The analysis indicated that a total of 64 participants (32 per group) would be sufficient to detect statistically significant differences between the intervention and control groups. A total of 64 students participated in this study, with equal distribution across both groups. Furthermore, participants who showed symptoms of disruptive behaviour during the cross-sectional phase (survey) were selected for the study.

A simple random sampling technique (balloting) was used to allocate participants who met the inclusion criteria into one of the two groups, which included one treatment condition and a control group. The two groups in this study comprised the Experimental Group (ABA reinforcement principles) and the Control Group (no reinforcement principles). Participants were placed into groups by balloting numbers 1 to 2, respectively. The inclusion criteria were students aged 12–18 years and identified by teachers/counsellors and screening tools as displaying persistent disruptive behaviours. They had both parent/guardian consent and student assent. They were enrolled as students in the school. The exclusion criteria were students diagnosed with severe neurodevelopmental conditions, students currently undergoing psychological treatment for behavioural issues, and students without informed consent from parent/guardian or lack of student assent.

An introduction letter was obtained from the researcher's institution and submitted with other required documents (application letter, proposal and questionnaire) to the Ministry of Basic and Secondary Education, Lagos State and the Head of Service, Lagos State, for proper permission to conduct the research and ethical review board approved the research with reference number RUN/REC/2024/244. After the permission had been granted, the researcher approached the principals of the selected schools to seek their approval to distribute questionnaires to students. The research's intentions and goals were communicated to the school administrators. The research explained to the school administrator the need to conduct the intervention study and that the study was based on the findings from the cross-sectional study their students completed. The selected students who showed medium to high symptoms of disruptive behaviour were attended to in a large classroom. Both groups were assessed using the CODDS (pretest), and their baseline data were collected. Afterward, the students were randomly assigned to either the experimental (intervention) or control group. Thereafter, the experimental group receiving the intervention were provided with the parents'/guardians' consent and assent forms to take home to their parents and guardians. After receiving the signed parental consent forms, the researcher started the intervention with the students.

The experimental group received an ABA-based intervention once a week, and each session lasted 45–60 minutes for 8 weeks. A trained ABA facilitator and the researcher delivered the intervention (ABA). The control group continued with their normal classroom activities with no added intervention. The participants were reassessed using the CODDS to collect their posttest scores (end-line data collection). Thereafter, a 4-week post-intervention follow-up was conducted to examine the sustainability of the behavioural improvement. The experiment spanned three months because it is an intervention study. Four research assistants and a certified ABA specialist were recruited for the intervention study. The intervention started with 100 participants (50 control and 50 experimental group). Some of the participants withdrew from the course of the intervention, and out of the 100 participants, only 90 participants completed the intervention study and follow-up assessment data were collected from 64 participants (48.4% male 51.6% female) and were subjected to further analysis.

Measures

Socio-demographic variables which are sex, age, class, school type, family type etc. The Conduct and Oppositional Defiant Disorder Scales (CODDS) developed by Raine et al. (2022) was used to assess disruptive behavior among the in-school adolescents. It is a 26-item instrument allowing the child to self-report and is modelled on the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM 5) (American Psychiatric Association, 2013), with the first 8 items assessing oppositional defiant disorder criteria and the 18 items assessing conduct disorder. Each item is assessed on a 3-point scale (never, sometimes, often), with items summed to yield conduct disorder and oppositional defiant disorder scores. The internal reliabilities for the disruptive behavior as reported by Raine et al. (2022), was 0.87. The scores will be interpreted based on the sample's distribution using the mean-based classification (Cohen and Swerdlik, 2018).

Data Analysis

Statistical Package for the Social Sciences version 25 was used for the data entry and analysis. Descriptive statistics were used to analyse the socio-demographics. Hypothesis one was tested using a paired sample t-test, hypothesis two was tested using ANCOVA and hypothesis one was tested using multiple regression analysis.

Results

Table 1: Frequency Distribution showing Respondents' Personal Information.

Variables		Frequency	Percentage
Sex	Male	329	50.2
	Female	326	49.8
	Total	655	100.0
Religion	Christianity	497	75.9
	Islam	154	23.5
	Traditional	3	.5
	Others	1	.2
	Total	655	100.0
School Type	Public	275	42.0
	Private	380	58.0
	Total	655	100
Who do you live with	Both father and mother	477	72.8
	Father alone	57	8.7
	Mother alone	77	11.8
	Relative	33	5.0
	Non-relative	11	1.7
	Total	655	100.0
Family Type	Monogamous	532	81.2
	Polygamous	123	18.8
	Total	655	100.0
School Name	Hanniel Private School	112	17.1
	Ikotun Comprehensive School	103	15.7
	Community Secondary School, Ikotun	122	18.6
	Ikotun High School	149	22.7
	Akodi School	110	16.8
	Queen Marris School	59	9.0
	Total	655	100.0
Age	Range: 12 – 18, Mean = 14.58, SD = 1.78		
Family Size	Range: 1 – 30, Mean = 5.78, SD = 1.99		

Hypothesis I

Table 2: Summary table of a paired t-test showing the difference between the baseline and endline disruptive behaviour scores of the experimental group who received Applied Behaviour Analysis (ABA) intervention.

	Testing	N	$\bar{x}$	S. D	df	t-value	Sig
DBDs	Baseline (Pretest)	32	7.69	3.43	31	4.29	.000
	Endline (Posttest)	32	4.75	3.06			

A paired-samples t-test was conducted to evaluate the effectiveness of the intervention by comparing the Baseline and Endline data. The result revealed that there was a significant difference between the baseline and endline disruptive behaviour scores of the experimental group who received Applied Behaviour Analysis (ABA) intervention ($t = 4.29$; $df = 31$; $p < .01$). The mean score at baseline ($\bar{x} = 7.69$, $SD = 4.61$) was significantly higher than the mean score at endline ($\bar{x} = 4.75$, $SD = 3.06$). The mean difference between baseline and endline scores was 2.94. These results suggest a significant reduction in the measured outcome following the intervention. The results confirm the stated hypothesis.

Hypothesis II

Table 3a: ANCOVA results for disruptive behaviour scores, controlling for pretest.

Source	SS	df	MS	F	p
Pretest (covariate)	89.15	1	89.15	2.59	>.05
Group	1976.05	1	1976.05	57.43	< .001
Error	2098.72	61	34.41		
Corrected Total	5023.44	63			

Table 3b: Estimated marginal means of disruptive behaviour scores by group.

Note. Means are adjusted for pretest scores. $R^2 = .582$ (Adjusted $R^2 = .569$).

Group	N	Adjusted M	SE	95% CI Lower	95% CI Upper
Control	32	18.06	1.04	15.98	20.14
Experimental	32	4.75	1.04	2.67	6.83

A one-way analysis of covariance (ANCOVA) was conducted to determine whether there was a statistically significant difference in posttest disruptive behaviour scores between the experimental and control groups while controlling for pretest scores. The covariate (pretest scores) was not significantly related to posttest scores, [$F(1,61) = 2.59$, $p > .05$]. After adjusting for pretest scores, there was a statistically significant difference in disruptive behaviour scores between groups, $F(1,61) = 57.43$, $p < .001$, partial $\eta^2 \approx .49$, indicating a large effect. Estimated marginal means indicated that students in the experimental group had significantly lower disruptive behaviour scores ($M = 4.75$, $SE = 1.04$, 95% CI [2.67, 6.83]) than students in the control group ($M = 18.06$, $SE = 1.04$, 95% CI [15.98, 20.14]).

Hypothesis III

Sociodemographic characteristics (age, sex, class, religion, type of family, family size and living status) will significantly, jointly, and inde-

pendently predict disruptive behaviour among in-school adolescents in Lagos State as tested using multiple regression. The result is presented in the table below:

Table 3: Summary table of multiple regression showing the joint and independent influence of Sociodemographic Factors on Disruptive Behaviour among in-school adolescents in Lagos State.

Model	R	R ²	F	P	B	t	Sig
	.270	.074	.636	.000			
Sex					-1.314	-2.55	.001
Age					.314	1.62	.105
Class					-.341	-1.19	.233
Religion					-.351	-0.61	.543
Family size					-0.36	-0.27	.787
School type					3.324	4.34	.000
Type of family					1.311	1.92	.056
Living with					.258	0.97	.332

From the table, it can be observed that there was a significant joint influence of socio-demographic factors on disruptive behaviour among in-school adolescents ($R = .270$; $F(7, 647) = 6.36$; $p < .001$). It can be observed that socio-demographic variables jointly accounted for 7.3% of the variance in disruptive behaviour. It can further be observed that sex ($\beta = -1.31$; $t = -3.37$; $p = .001$) and school type ($\beta = 3.32$; $t = 5.44$; $p < .001$) had significant independent contributions to disruptive behaviour. However, other socio-demographic variables — age ($\beta = .02$; $t = .45$; $p > .05$), class ($\beta = .05$; $t = 1.20$; $p > .05$), religion ($\beta = -.04$; $t = -1.00$; $p > .05$), family size ($\beta = .03$; $t = .75$; $p > .05$), family type ($\beta = -.02$; $t = -.50$; $p > .05$), and living arrangement ($\beta = .01$; $t = .22$; $p > .05$) — did not take significant independent contributions. Therefore, the stated hypothesis that socio-demographic factors will have significant joint and independent influence on disruptive behaviour is thereby partially accepted.

Discussion

The findings of this study revealed a significant reduction in disruptive behaviour among students who participated in the intervention compared to those in the control group. After controlling for pretest scores, students in the experimental group exhibited substantially lower disruptive behaviour scores than their counterparts in the control group, with a large effect size. This suggests that the intervention was highly effective in reducing disruptive behavioural tendencies among in-school adolescents. Furthermore, the findings of this study strongly support the effectiveness of the Applied Behaviour Analysis (ABA) intervention in reducing disruptive behaviour among in-school adolescents, reinforcing its value as a practical, evidence-based approach in educational settings. The observed behavioural improvements among the adolescents who received the intervention reflect the capacity of ABA techniques (positive reinforcement, functional communication training, and environmental adjustment) to bring about measurable changes in behaviour.

The observed reduction aligns with previous evidence, which has long established ABA as a gold standard in behaviour modification, particularly among children with developmental and behavioural challenges (Gitimoghaddam et al., 2022). The non-significant effect of pretest scores implies that post-intervention outcomes were not merely a continuation of baseline behaviour levels but were likely attributable to the intervention activities. This finding highlights the potential of targeted behavioural modification strategies, such as dif-

ferential reinforcement, behaviour contracts, and token economies, to foster positive behavioural change in school settings.

Importantly, the difference in behavioural outcomes between those who received the intervention and those who did not highlights the importance of structured and targeted behavioural support, particularly in school environments where disruptive behaviour can severely hinder academic performance, teacher effectiveness, and peer relationships. Furthermore, the substantial reduction in post-intervention disruptive behaviour suggests that the intervention had a meaningful impact on the students' ability to regulate emotions, respond appropriately to authority, and engage more constructively in school life. This agrees with previous studies (Bradshaw et al., 2012; Steenweg et al., 2025), which found that school-based behavioural interventions not only reduce problem behaviour but also contribute to a more positive school environment.

The hypothesis, which states that there will be a significant joint and independent influence of sociodemographic characteristics on disruptive behaviour disorders among in-school adolescents in Lagos State, was partially confirmed. The results revealed that age, sex, class, school type and type of family jointly and significantly predicted disruptive behaviour disorders (DBDs). and explained approximately 3% of the variance in DBDs. Among the predictors, only sex and school type had a positive influence on DBDs, indicating that male students and private schools had higher DBDs scores compared to female students and public schools, respectively. Age, class, and type of family did not significantly predict DBDs.

On the sex influence on DBDs, the findings agree with the assertions of previous researchers. For instance, Mohammadi et al. (2021) claimed that disruptive disorders are common in male than female. However, the findings contradict the findings of Ojo et al., (2025) who found a significant difference between sex and conduct problems, even though females displayed two classes of conduct problems that were largely distinguishable based on the severity of conduct problems. The higher score in males could be tailored towards the fact that males are more prone to externalising disorders and aggressive behaviour (DSM-TR, 2022); a function of biological make-up and the high testosterone levels associated with males, which could potentially lead to aggressive behaviour and risk-taking behaviours (Batriños, 2012). Furthermore, social expectations often encourage assertiveness and dominance in boys, which can sometimes manifest as defiance and rule-breaking behaviours. Moreover, male peer groups tend to reinforce risk-taking and aggressive behaviours, contributing to a higher prevalence of disruptive behaviours in male adolescents. On the significant of school type on disruptive behaviour among in-school adolescents.

The finding disagrees with the findings of Ojuope and Ekundayo (2020) and Ojo et al. (2025) who found no significant relationships between conduct disorder and school type. However, contrary to expectations, the results indicate that students attending private secondary schools scored significantly higher on measures of disruptive behaviour compared to their counterparts. The findings indicate that private school students often face higher academic expectations and pressures from parents, leading to stress, frustration, and potential behavioural issues. The demand for high academic performance may lead some students to engage in disruptive behaviours as a way of rebelling against strict school rules. Furthermore, many students in private schools come from middle- to upper-class backgrounds, where they may have greater financial and social privileges. These privileges may result in entitlement behaviours, where students feel less constrained by school rules, leading to higher instances of disruptive

behaviours. Public schools, despite facing resource limitations, often have stricter disciplinary measures due to larger class sizes and concerns over student control. Private schools may prioritise customer satisfaction (since they rely on tuition fees), leading to more lenient discipline policies, which could contribute to increased disruptive behaviours.

Furthermore, age was found not to significantly predict disruptive behaviour disorders among in-school adolescents in Lagos State. The findings supported the submission of Ojuope and Ekundayo (2020), who, from their study, found no significant relationships between conduct disorder and age but disagree with the findings of Akpan et al. (2020), who found that younger children (aged 6–9 years) were predisposed to disruptive disorder compared to older children (10–12 years), making up 76.5% of diagnosed cases. The result further revealed that family type did not significantly predict disruptive behaviour disorders. The findings corroborate the findings of Ojuope and Ekundayo (2020), who found no significant relationships between conduct disorder and family type. However, the findings contradict those conducted by Byansi et al. (2022), who found family factors associated with adolescent disruptive disorders. This means that whether a child comes from a monogamous or polygamous family, their likelihood of developing disruptive behaviours such as Oppositional Defiant Disorder (ODD) or Conduct Disorder (CD) remains relatively unchanged.

Conclusion

Conclusively, this study examined the effect of Applied Behaviour Analysis (ABA) on disruptive behaviour disorders among in-school adolescents in Lagos State, with a focus on the role of sociodemographic factors. The findings demonstrated that adolescents who received ABA showed significant reductions in disruptive behaviour both within the experimental group and in comparison with the control group. This confirms the effectiveness of ABA as an evidence-based behavioural intervention in the Nigerian school context. By linking these findings within the Nigerian context, the study contributes to the growing body of literature on adolescent behaviour management. It shows that ABA is both effective and adaptable to the realities of Nigerian schools, where issues such as large class sizes, gender differences, and institutional resources strongly shape behavioural outcomes.

Recommendations

This study recommends that ABA be adopted as a structured behavioural intervention in secondary schools to help reduce disruptive behaviour among adolescents. Teachers should be given practical training on how to apply ABA strategies in classrooms so that they can consistently reinforce positive behaviour and reduce negative patterns and also Since the study found that male students are more prone to disruptive behaviours, ABA should be designed with sensitivity to gender differences, providing additional support for boys while ensuring inclusiveness for all learners. Public schools, where disruptive behaviours appeared more pronounced, should particularly benefit from the implementation of ABA-based programmes supported by trained personnel and adequate resources.

Limitations of the study

While the study introduced a longitudinal component, the follow-up duration was short and did not allow for assessment of the long-term sustainability of the ABA intervention's effects. Furthermore, the study was geographically limited to Lagos State, which, while diverse and populous, may not reflect the behavioural dynamics or socio-cultural realities of adolescents in rural or less urbanised regions of

Nigeria. Furthermore, some of the participants withdrew from the study during the follow-up assessment, which affected the samples size used for the study.

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