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The Relationship between Resilience and Disruptive Behaviour among In-School Adolescents in Lagos State

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Received: 31 July 2025; Accepted: 8 September 2025; Available online: 19 September 2025

ABSTRACT: This study investigated the relationship between resilience and disruptive behaviour among in-school adolescents in Lagos State, Nigeria. The objectives were to examine: the association between six resilience dimensions (family support, confidant-friend support, school support, adjustment, sense of struggle, and empathy) and disruptive behaviour; the differences between sex and family type on disruptive behaviour. A cross-sectional design was employed, sampling 897 adolescents (M = 14.8 years; 50.8% male) from selected secondary schools using a multi-stage sampling technique. Data were collected using validated psychological resilience and disruptive behaviour scales. Results revealed a significant negative correlation between disruptive behaviour and four resilience dimensions: family support, school support, sense of struggle, and empathy. Regression analysis showed that these resilience dimensions jointly accounted for 6.6% of the variance in disruptive behaviour, with only family and school support emerging as significant predictors. Male adolescents exhibited significantly higher disruptive behaviour than females, while no significant differences were found based on family type. The findings highlight the crucial role of familial and school support in behavioural regulation and suggest the need for gender-sensitive and context-specific interventions.

Keywords: Resilience; Disruptive behaviour; Adolescents; Sex; Family type



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1. Introduction

Adolescence represents a critical developmental stage characterised by rapid biological, psychological, and social transitions. During this period, young individuals face increasing challenges in adapting to complex expectations from family, school, and society. These developmental shifts may contribute to the emergence of various behavioural patterns, some of which are deemed disruptive within academic and social settings. Disruptive behaviour is generally classified under three categories: oppositional behaviour, physical aggression, and hyperactivity [1]. These behaviours, while part of normal developmental trajectories in early childhood, are generally expected to decline as children progress into adolescence due to socialisation and increased self-regulation [2]. However, for a subset of adolescents, these behaviours persist or intensify, often resulting in disciplinary actions, poor academic outcomes, peer rejection, and in extreme cases, criminal engagement [3]. Disruptive behaviours, including aggression, defiance, impulsivity, and disobedience, not only hinder adolescents' academic achievement but also negatively affect the learning environment for others [4].

1.1. Definitions

The APA Dictionary of Psychology [5] broadly characterises it as “any behaviour that significantly interferes with the functioning of a group or the learning of an individual or others”, commonly manifesting through rule-breaking, noncompliance, or aggression, especially in classroom environments. Expanding on this, Guil et al. [6] define disruptive behaviour as “any student behaviour that interferes, disturbs, interrupts, and prevents teachers from performing their educational work”, highlighting its direct impact on teaching efficacy. Similarly, Franken [7] emphasises the

educational implications, describing disruptive behaviour as “any behaviour that interferes with teaching and learning”, which may take verbal, physical, or even organisational forms. Along the same lines, Okeke et al. [8] define disruptive learner behaviour as student actions that “consistently interfere with [the teacher’s] teaching and hinder other learners from learning”, including rule refusal, disrespect, inattention, and the misuse of cell phones. Beyond general classroom disturbances, some scholars have examined disruptive behaviour specifically in adolescence. Carolyn et al. [9] characterise it as a broad spectrum of behaviours ranging from disobedience and defiance to aggressive acts, substance abuse, lying, theft, and property destruction. Karimy et al. [10] similarly define adolescent disruptive behaviours as defiance of authority, furious outbursts, and various anti-social acts such as stealing and lying. Moving beyond school-based definitions, Aldabbagh et al. [11] broaden the scope by framing disruptive behaviours as externalising problems that frequently co-occur with clinical conditions like conduct disorder and attention-deficit/hyperactivity disorder (ADHD). Their systematic review and meta-analysis underscore the diagnostic relevance of such behaviours, illustrating the need to understand them within educational settings and through a broader clinical and psychological lens.

Adolescents with disruptive behaviour often encounter significant long-term consequences. For example, persistent school disengagement and dropout are now strongly linked to earlier conduct-related issues [12]. Emotional dysregulation, which happens to be a major characteristic of disruptive conduct, is associated with difficulties in emotional recognition and a heightened risk of later mental health disorders [13]. Trajectories marked by early disruptive behaviour have also been shown to predict anti-social personality development, particularly when compounded by ongoing emotional and behavioural challenges [14]. Adolescents displaying persistent disruptive patterns are at elevated risk for substance use disorders, depression, criminal involvement, and social maladjustment in young adulthood [12–14].

Among the several psychological constructs investigated as protective or risk-modifying factors for maladaptive behaviours, resilience has gained notable attention in recent years. Traditionally, resilience has been viewed as a dynamic process rather than a fixed trait, as it has been widely conceptualised as both a process and an outcome that enables individuals to adapt effectively in the face of adversity. According to the APA Dictionary of Psychology [15], resilience refers to “the process and outcome of successfully adapting to difficult or challenging life experiences, especially through mental, emotional, and behavioural flexibility and adjustment to external and internal demands”. Expanding on this foundational view, Ayed et al. [16], in their systematic review of adult mental health literature, conceptualise resilience as both a dynamic process, reflected in themes such as “immunity”, “bouncing back”, and “growth” and a trait-like capacity shaped by personal and social resources. Sisto et al. [17] define resilience as “the ability to recover from perceived adverse or changing situations, through a dynamic process of adaptation”, highlighting the influence of individual, familial, and social support systems. Vella and Pai [18] further support this dynamic framing, describing resilience as “a process encompassing positive adaptation within the context of significant adversity”, and reinforcing the understanding that resilience unfolds over time in response to life stressors. Kalisch et al. [19] take this a step further by emphasising the mental health dimension, defining resilience as “the maintenance or quick recovery of mental health during and after adversity”. They stress that resilience is not all about the absence of mental illness but an active, ongoing process of maintaining psychological well-being under stress or trauma. It can be seen that these perspectives reflect the evolving understanding of resilience as both situational and developmental in nature. Building upon these conceptual foundations, more recent studies have emphasised resilience’s adaptive and protective roles, particularly in adolescent populations. In this context, resilience has been broadly defined as the capacity to adapt positively despite exposure to adversity, trauma, or significant stress [20,21]. Resilient adolescents typically exhibit stronger emotional regulation, adaptive coping strategies, and greater persistence in goal-directed behaviours even in challenging environments. In some cases, these traits can serve as a protective factor against the development of disruptive tendencies, particularly in contexts characterised by socio-economic hardships, familial instability, or academic stressors.

1.2. Prevalence

Empirical studies have consistently demonstrated a significant inverse relationship between resilience and risk-taking or anti-social behaviour in adolescent populations. Onah et al. [22] conducted a study among 200 out-of-school adolescents in the Kosofe Local Government Area of Lagos State to investigate the predictive influence of stress and resilience on risky behaviour. Their findings revealed that resilience significantly predicted a reduction in risky behaviours, accounting for approximately 17.9% of the variance. This suggests that higher resilience levels may reduce adolescents’ tendencies to engage in behaviours such as aggression, truancy, or substance use. While the study focused

on out-of-school adolescents, its implications for in-school youth remain relevant given similar psycho-social stressors faced by both groups. A broader national study examined 1419 Nigerian adolescents aged 13 to 19, assessing how resilience relates to mental health issues and substance use. The study found that greater resilience was significantly associated with lower odds of anxiety, depression, problematic alcohol use, and multi-substance use, with adjusted odds ratios ranging from 0.94 to 0.97 [23]. Although the study did not measure disruptive behaviour directly, its findings support the notion that resilience serves as a general buffer against externalising and internalising behavioural problems.

1.3. Theoretical Model

This study is anchored on Masten's [24]. Ecological Models of Risk and Resilience build on Bronfenbrenner's ecological perspective by conceptualizing resilience as the result of dynamic interactions between individuals and their multilayered environments. Masten emphasizes that resilience emerges not simply from personal strengths but from the availability and mobilization of protective resources embedded within families, schools, communities, and broader cultural systems. Applied to disruptive behaviour among adolescents in Lagos State, this framework suggests that resilience functions as a buffering process against behavioural risks. While intrapersonal traits such as adaptability and empathy contribute to adjustment, external supports, particularly family and school systems, serve as more decisive protective factors. Conversely, risks such as deviant peer influence, weak home-school linkages, or unsupportive cultural norms can undermine resilience and foster maladaptive behaviours. Thus, consistent with Masten's model, adolescent disruptive behaviour is best understood as the product of an ecological balance between risks and protective resources, where family and school support play pivotal roles in promoting positive behavioural regulation.

1.4. Empirical Review

Tan et al. [25], in their study using 353 primary school students and parents to explore the role of resilience in adolescent mental health development and its impact on behavioural patterns, revealed that resilience predicts disruptive behaviour in adolescents by serving as a protective factor against the negative effects of stressors. The research indicates that higher levels of psychological resilience can mitigate the impact of stressors, thereby reducing the likelihood of behavioural problems. Conversely, when adolescents experience significant stressors, their resilience may decrease, leading to an increased risk of disruptive behaviours. Mastromatteo et al. [26] compared models of resilience in high-risk youth using a sample of 4897 participants, of which 52% were female, revealing that resilience factors such as social skills and connectedness can mitigate adolescent maladjustment, including disruptive behaviour, despite intergenerational risks. Through mixed qualitative-quantitative research involving 433 teachers and 6453 students, it was found that developing student resilience mitigates disruptive behaviours, highlighting the need for systemic interventions involving community, educators, and families [27]. Similarly, Liebenberg [28] explored the dynamics of resilience in child and youth mental health as an interactive process influenced by personal assets and sociocultural context, suggesting resilience strongly shapes disruptive behaviour among adolescents, particularly in culturally specific environments. Motti-Stefanidi & Masten [24] emphasised that resilience in immigrant youth, influenced by cultural factors and psychological mechanisms, can mitigate disruptive behaviour, while others highlighted that resilience influences disruptive behaviour by enabling adaptive capacity within society, allowing individuals to adjust their travel patterns and activities during disruptions [29].

Additional studies further elaborate on the mechanisms by which resilience affects behavioural outcomes in adolescents. Mota et al. [30] tested the predictive effect of quality relationships with institutional caregivers and teachers on developing resilience and deviant behaviour in 202 institutionalised adolescents aged 12–18. Their findings indicated that resilience mediates the relationship between the quality of relationships with significant adults and the development of deviant behaviour, with higher quality relationships fostering resilience and preventing disruptive behaviour. In a study from [31], using a qualitative transversal method, characterised resilience in 10th-grade students in Portoviejo, showing that resilience, particularly among females, can reverse behavioural problems. Zhuyue [32] examined adolescents during the COVID-19 epidemic and found that resilience mediates the relationship between parental attachment and behaviour problems, with higher resilience linked to fewer disruptive behaviours. WANG et al. [33], through a cohort study of 1605 students, determined that changes in resilience mediate the impact of child maltreatment on emotional-behavioural problems such as conduct issues and hyperactivity, suggesting resilience as a protective factor. Corchado Castillo et al. [34] supported this view, finding that adolescents facing multiple risk factors benefited from psycho-social interventions that foster resilience, leading to better behavioural outcomes. Duan [35] identified individual and environmental factors influencing adolescent resilience, revealing that negative perceptions and avoidant

behaviours contribute to maladaptation, whereas higher resilience enables effective coping. Hosiri et al. [36] found a significant negative correlation between resilience and behaviour problems among 374 Thai adolescents, reinforcing the protective function of resilience.

In extending the understanding of how resilience interacts with behavioural outcomes, recent studies have also begun to examine how sex influences the manifestation of disruptive behaviours in adolescents. Guil et al. [6] explored the intersection of sex, coping strategies, and classroom behaviour through an ex post facto and cross-sectional design. Their findings revealed that girls were more prone to disobedience and aggression directed at teachers and materials, whereas boys exhibited a wider array of disruptive behaviours. Adding a developmental and psycho-social dimension, Heyder et al. [37] employed a three-wave panel study with over 4200 Flemish early adolescents, examining how pressure to conform to gender stereotypes predicts school misconduct. Their longitudinal study revealed that felt pressure to conform to masculine norms significantly predicted this increase in boys, whereas girls, experiencing less pressure, maintained better adherence to school norms. Van Houtte [38] also investigated how school-level, gender role cultures influence student behaviour using hierarchical linear modelling (HLM) on data from over 5000 8th-grade students and 1200 teachers. They found out that boys generally exhibit more disruptive behaviours than girls, and this was shaped by the prevailing gender role culture within schools. Their findings reveal that more traditional school cultures correlated with lower levels of disruptive behaviour among girls. Similarly, Tounsi et al. [39] examined sex and school-level factors in the context of physical education (PE) classes among 632 Tunisian students. Their findings align with previous studies, demonstrating that boys were significantly more likely to engage in aggressive behaviours, disrupt peers, and struggle with self-management compared to girls.

As Onah [22] emphasised, Nigeria continues to grapple with structural educational and socio-economic deficits, which create conditions ripe for youth disengagement and behavioural issues. Within such an environment, resilience can serve as a critical determinant of behavioural outcomes, potentially guiding preventive interventions and policy reforms to promote positive youth development. Despite the growing interest in resilience, most existing studies in Nigeria have focused on its relationship with risky behaviour or academic outcomes, with limited attention to its specific influence on in-school adolescents' disruptive behaviours. Given the significant implications of disruptive behaviour on student performance and school climate, it is essential to deepen our understanding of how resilience influences such behaviours in formal educational settings, which will not only contribute to the academic literature but will also provide practical insights for educators, counsellors, and policymakers to design effective behavioural interventions. In line with this, the current study investigates how resilience among in-school adolescents in Lagos State predicts disruptive behaviour. Specifically, the study aims to;

1. To examine the relationship between resilience (family support, confidant-friend support, school support, adjustment, sense of struggle, empathy) and disruptive behaviour among in-school adolescents in Lagos State.
2. To examine the joint and independent prediction of resilience (family support, confidant-friend support, school support, adjustment, sense of struggle, empathy) on disruptive behaviour among in-school adolescents in Lagos State.
3. To examine differences between sex and disruptive behaviour among in-school adolescents in Lagos State.
4. To examine differences between family type and disruptive behaviour among in-school adolescents in Lagos State.

Hypotheses

1. There will be a significant relationship between resilience (family support, confidant-friend support, school support, adjustment, sense of struggle, empathy) and disruptive behaviour among in-school adolescents in Lagos State.
2. Resilience (family support, confidant-friend support, school support, adjustment, sense of struggle, empathy) will jointly and independently predict disruptive behaviour among in-school adolescents in Lagos State.
3. There will be a significant difference between sex and disruptive behaviour among in-school adolescents in Lagos State.
4. There will be a significant difference between family type and disruptive behaviour among in-school adolescents in Lagos State.

2. Material and Methods

2.1. Design

The study employed a cross-sectional research design using quantitative methods. The study was conducted among in-school adolescents in some selected secondary schools in Lagos State, Nigeria. The socio-demographic variables are

sex, age, school type and family type; the independent variable is resilience (family support, confidant-friend support, school support, adjustment, sense of struggle, empathy), while the dependent variable is disruptive behaviour disorders.

2.2. Participants and Sampling Techniques

Krejcie and Morgan's [40] sample size determination table was used to select 897 [male = 456 (50.8%) and female 441 (49.2%)] with a mean age = 14.8, SD = 1.5.

A multi-stage sampling technique consisting of four stages was employed to select in-school adolescents across secondary schools in Lagos State. The Lagos State Secondary Education System is divided into six education districts. In the first stage, four (4) districts (I, IV, V and VI) were randomly selected using a simple random sampling technique (balloting). Within each selected education district, the schools were stratified into public and private schools. From each stratum (public and private) within the selected districts, twelve schools were randomly selected using a table of random numbers. Afterwards, a convenience sampling technique was used to administer the research instruments to the students who met the inclusion criteria across the selected schools.

The inclusion criteria are adolescents between the age range of 11–18 years and should be able to read and write effectively, while the exclusion criteria are children below 11 years and adults above 18 years, adolescents not in secondary school or adolescents in technical schools or tertiary institutions.

2.3. Data Collection Procedures

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. 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 school authority granted permission to the researcher to administer the questionnaire to the students. The selected students were attended to in their various classrooms, and parents'/guardians' consent and assent forms were provided to them to take home to their parents and guardians. After receiving the signed parental consent forms, the students were provided with questionnaires to fill out. Students who volunteered and gave their agreement to participate were given the questionnaire by the researchers, who visited each classroom. The researcher established a positive rapport with the participants and explained the goal of the study while assuring them of its confidentiality. The participants filled out the surveys right away, while the researchers waited to pick them up. The fieldwork for this research spanned one week due to the distant locations of the samples.

2.4. Measures

A socio-demographic questionnaire was administered to the respondents to gather their sex, age and school type. Thereafter, the Adolescent Psychological Resilience Scale (APRS) developed by Bulut et al. [41] was used to assess the adolescents' psychological resilience. The ARS consists of 29 items across six factors: Family Support (1, 2, 3, 4, 8, 9, 12), Confidant-Friend Support (24, 25, 27, 28, 29), School Support (10, 11, 17, 22, 23), Adjustment (5, 6, 7, 13), Sense of Struggle (14, 15, 16, 18, 26), (Empathy: 19, 20, 21). The scale is rated on a 5-point Likert scale from 1 (Strongly Disagree) to 5 (Strongly Agree). Subscale scores are calculated by averaging the responses within each factor, and a total resilience score is obtained by averaging all item responses. The reverse scoring is items 10, 11, 17, 22, 23, 14, 15, 16. Bulut et al. [42] reported Cronbach's alpha 0.61 and 0.89 for the subscales-ranged alpha values. A test-retest correlation coefficient of 0.87 and an internal consistency of 0.87 were reported for the whole scale Bulut et al. [41]. The pilot study conducted by the researcher reported a Cronbach's alpha reliability of 0.72. The composite score is computed by summing all the 29 items. (minimum = 29 and maximum = 145). The higher the score, the higher the resilience. The pilot study conducted by the researcher using samples from Nigeria, reported a Cronbach's alpha reliability of 0.81 for the Adolescent Psychological Resilience Scale.

The CODDS developed by Raine et al. [43] was used to assess disruptive behaviour disorders. It is a 26-item instrument allowing the child to self-report. It is modelled on the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM 5) [42], 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 disruptive behaviour

disorder reported by Raine et al. [43], was 0.89. The pilot study conducted by the researcher using samples from Nigeria reported a Cronbach's alpha reliability of 0.87 for disruptive behaviour.

2.5. Data Analysis

Descriptive and inferential statistics were used to analyse the data using SPSS version 25 statistical software. Descriptive statistics were used to determine the socio-demographic distribution of the respondents, while hypotheses one was tested using Pearson Product Moment Correlation Analysis, hypothesis two was tested using Multiple Linear Regression, while hypotheses three and four were tested using a *t*-test for independent means.

3. Results

3.1. Socio-Demographic Distribution of the Respondents

Table 1 shows the distributions of the socio-demographic characteristics of the respondents. It was revealed that 50.8% were male respondents and 49.2% were female. The result revealed that 77.7% were Christians, 21.4% were Muslims, traditional were 0.8% and 0.1% chose other religions. In the area of respondents' school type, 52.3% of the respondents were attending public schools, while 47.7% were from private schools. 82.5% of the respondents came from a monogamous family, while 17.5% from a polygamous family. The respondents' age ranged between 12 years and 19 years ($M = 14.6$, $SD = 1.5$).

Table 1. Descriptive data.

Factors	Options	Frequency	%
Sex	Male	456	50.8
	Female	441	49.2
	Total	897	100.0
Religion	Christian	697	77.7
	Muslim	192	21.4
	Traditional	7	0.8
	Others	1	0.1
	Total	897	100.0
School type	Public	469	52.3
	Private	428	47.7
	Total	897	100
Family Type	Monogamous	740	82.5
	Polygamous	157	17.5
	Total	897	100.0
Age (in years)	Mean 14.8; SD = 1.52 Ranges between 12 and 19		

3.2. Hypothesis One

The result of multiple regression (Table 2) showed a significant negative correlation exist between family support and disruptive behaviour, ($r = -0.17$; $p < 0.01$), school support was significantly negatively correlated with disruptive behaviour, ($r = -0.20$; $p < 0.01$), Sense of struggle ($r = -0.10$; $p < 0.01$) and empathy ($r = -0.09$; $p < 0.01$) also showed significant but weak negative correlations with disruptive behaviour. No relationships were found between confidant–friend support ($r = -0.05$; $p > 0.01$), adjustment ($r = -0.04$; $p > 0.01$) and disruptive behaviour.

Table 2. Summary of correlation matrix showing the relationship between resilience (family support, confidant-friend support, school support, adjustment, sense of struggle, empathy) and disruptive behaviour among in-school adolescents in Lagos State.

Variables	Mean	SD	1	2	3	4	5	6	7
Family Support	31.04	4.54	-						
Confident-Friend Support	20.16	4.88	0.33 **	-					
School Support	17.39	5.58	0.10 **	0.04	-				
Adjustment	14.76	3.11	0.27 **	0.14 **	-0.14 **	-			
Sense Struggle	17.59	3.60	0.15 **	0.08 *	0.38 **	-0.12 **	-		

Empathy	12.44	2.76	0.29 **	0.29 **	0.01	0.23 **	-0.02	-
Disruptive Behaviour	11.81	7.82	-0.17 **	-0.05	-0.20 **	-0.04	-0.10 **	-0.09 **

** Correlation is significant at the 0.01 level (2-tailed); * Correlation is significant at the 0.05 level (2-tailed).

3.3. Hypothesis Two

The result of multiple regression (Table 3) showed that resilience jointly predicts disruptive behaviour among in-school adolescents in Lagos State [$R^2 = 0.066$, $F = 10.56$, $p < 0.01$]. Resilience jointly accounted for 6.6% of the variance observed in disruptive behaviour. family support ($\beta = -0.130$, $t = -3.56$, $p < 0.01$) and school support ($\beta = -0.188$, $t = -5.34$, $p < 0.01$) were significant independent predictors of disruptive behaviour. However, confidant-friend support ($\beta = 0.021$, $t = 0.60$, $p > 0.01$), adjustment ($\beta = -0.021$, $t = -0.60$, $p > 0.01$), sense of struggle ($\beta = -0.017$, $t = -0.46$, $p > 0.01$), and empathy ($\beta = -0.055$, $t = -1.56$, $p > 0.01$) did not significantly predict disruptive behaviour independently.

Table 3. A summary table of multiple regression shows the significant joint and independent prediction of resilience on disruptive behaviour among in-school adolescents in Lagos State.

Model	R	R ²	F	Sig	β	T	Sig
Constant	0.258	0.066	10.557	0.000			
Family Support					-0.130	-3.56	0.000
Confidant-Friend Support					0.021	0.60	0.550
School Support					-0.188	-5.34	0.000
Adjustment					-0.021	-0.60	0.549
Sense of Struggle					-0.017	-0.46	0.643
Empathy					-0.055	-1.56	0.120

3.4. Hypothesis Three

The result of multiple regression (Table 4) showed that sex has a significant difference in disruptive behaviour disorders ($t = 5.49$; $df (895)$; $p < 0.01$). Male in-school adolescent significantly scores higher (Mean = 13.19 and SD = 8.77) on the measures of disruptive behaviour disorders compared to their female counterparts (Mean = 10.37 and SD = 6.39).

Table 4. T-test for independent means showing the difference between sex and Disruptive Behaviour Disorder among in-school adolescents.

	Sex	N	Mean	Std	Df	t-Value	Sig
Disruptive Behaviour Disorder	Male	456	13.19	8.77	895	5.49	0.000
	Female	441	10.37	6.39			

3.5. Hypothesis Four

The result of multiple regression (Table 5) showed no significant difference between family type and disruptive behaviour disorders ($t = -0.69$; $df (895)$; $p > 0.01$).

Table 5. T-test for independent means showing the difference between family type and Disruptive Behaviour Disorder among in-school adolescents.

	Family Type	N	Mean	Std	Df	t-Value	Sig
Disruptive Behaviour Disorder	Monogamous	740	11.72	7.89	895	-0.69	0.490
	Polygamous	157	12.19	7.49			

4. Discussion

The current research posited a significant relationship between resilience and disruptive behaviour among in-school adolescents in Lagos State. The finding further suggests that adolescents who reported higher levels of perceived support from family and school, as well as greater emotional perseverance and empathy, were less likely to engage in disruptive behaviours. However, confidant-friend support and adjustment did not show significant associations with disruptive behaviour. These findings are consistent with prior research. Take for instance, the study from [24] in which their study found that resilience plays a protective role against the development of behavioural problems in adolescents, particularly

under stressful conditions. Likewise, a study from [39] reported that resilience significantly predicted a reduction in risky behaviours among adolescents, even though their sample consisted of out-of-school youth. The current findings support these conclusions within an in-school population, reinforcing resilience as a buffer against maladaptive behavioural tendencies.

The significant negative relationship between family support and disruptive behaviour aligns with studies from [26,29] which stressed the role of supportive adult relationships in fostering resilience and reducing deviant behaviours in youth. Similarly, the negative correlation between school support and disruptive behaviour also aligns with the findings from [27], who reported that contextual and institutional support systems are critical in shaping behavioural outcomes during adolescence. Interestingly, the current study also found that sense of struggle and empathy (both of which are internal dimensions of resilience) were negatively related to disruptive behaviour, though weakly. This supports the work of [25], who identified social-emotional competencies such as connectedness and emotional awareness as critical resilience factors that mitigate behavioural issues. The study from [30] also emphasised that resilience among adolescents, particularly females, can reverse behavioural problems, further validating these associations. However, the lack of a significant relationship between confidant-friend support and disruptive behaviour deviates from some previous studies that emphasise the protective influence of peer relationships in adolescent adjustment. One possible explanation is that peer support, in the context of in-school adolescents is that peer support may not necessarily foster adaptive outcomes. If peer groups themselves encourage and reinforce disruptive tendencies such as aggression, defiance, and truancy, then peer support could maintain or aggravate disruptive behaviours rather than buffer against them. Hence, the cultural and social dynamics of peer influence in this setting may weaken the protective influence typically associated with supportive friendships. Similarly, the non-significant relationship between adjustment and disruptive behaviour might suggest that interpersonal adaptability alone may not sufficiently regulate behaviour. The adolescents' behaviour adjustment may rely more heavily on an external regulation system, such as family monitoring, teachers' guidance and school disciplinary structures. In other words, adolescents may require consistent external scaffolding to translate adjustment skills into reduced disruptive behaviour. This finding emphasises the importance of ecological perspectives, where adolescents' adjustment must be considered alongside family, school and community influences in shaping behavioural outcomes.

The findings further revealed that resilience (Family Support, Confidant-Friend Support, School Support, Adjustment, Sense of Struggle, Empathy) jointly predicted disruptive behaviour, accounting for 6.6% of the variance in disruptive behaviour, which indicates a statistically significant contribution. This aligns with findings by [22,23], who demonstrated that resilience serves as a protective factor against behavioural problems in adolescents. Although the explained variance was relatively small, the result reinforces the importance of resilience in shaping behavioural outcomes within school environments.

Although family and school support emerged as significant protective factors, the modest variance explained suggests that additional processes may underlie the relationship between resilience and disruptive behaviour. One such process is the role of coping mechanisms, which were not examined in this study. While resilience reflects the availability of protective resources, coping strategies determine how adolescents mobilize these resources to regulate behaviour in the face of stressors. Evidence from Bonfiglio et al. [44] indicates that resilience and coping often operate together, with adaptive coping styles reinforcing resilience and maladaptive coping undermining it, particularly in youth populations vulnerable to behavioural dysregulation. A finding that reflects earlier research by [27,29] highlighted the critical role of supportive relationships with caregivers and educational institutions in fostering resilience and reducing behavioural issues. The non-significant contributions of confidant-friend support, adjustment, sense of struggle, and empathy suggest that these factors may require interaction with external systems to exert meaningful behavioural influence.

The findings also revealed that boys are more likely to engage in behaviours such as defiance, aggression, or rule-breaking. This finding aligns with the results of [36,38], both of which reported higher rates of disruptive behaviours among male students across different cultural contexts. It also supports the from [6], who found that pressure to conform to masculine norms significantly predicts increased misconduct in boys over times. Likewise, this study reinforces [37] conclusion that school-level gender role cultures and individual beliefs about sex roles shape behavioural patterns, especially in boys. The higher score in males could be tailored towards the fact that males are more prone to externalising disorders and aggressive behaviour [45]; 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 [46–48]. 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. In contrast, female adolescents may benefit from socialisation processes that promote compliance, emotional control, and relational harmony.

Family type (monogamous or polygamous) was found to have no significant influence on disruptive behaviour. This finding agrees with that of [45], who, in a longitudinal study, reported that family structure, be it monogamous, polygamous, or otherwise, had no significant difference on adolescent disruptive behaviour once early-life adjustment and contextual variables were accounted for. This suggests that structural classification of the family may not be a reliable indicator of behavioural tendencies. In a similar Nigerian study [49], it was found that family type did not predict adolescent engagement in cyber addiction or experiences of sexual abuse. The current study result is also in line with the study by [50], which also reported no significant differences in social or academic adjustment between adolescents from the two family types, further weakening the argument for family structure as a sole predictor of behavioural adjustment.

5. Conclusions

In light of the growing concern around adolescent behavioural challenges in school settings, this study explored the link between resilience and disruptive behaviour among in-school adolescents in Lagos State. Based on the results and specific characteristics of our sample, the following conclusions can be drawn. Our findings indicate that certain dimensions of resilience, particularly family support, school support, sense of struggle, and empathy, are significantly associated with reduced disruptive behaviour. However, confidant-friend support and adjustment did not demonstrate such associations. This suggests that while intrapersonal resilience traits are valuable, relational and institutional support systems play a more pivotal role in behavioural regulation among adolescents. Furthermore, regression analysis revealed that family and school support were the only significant independent predictors of disruptive behaviour, reinforcing the importance of external protective factors. Secondly, male adolescents were found to exhibit significantly higher levels of disruptive behaviour than their female counterparts. This gender difference may be linked to socio-cultural expectations, emotional regulation patterns, and normative beliefs about masculinity, as highlighted in both this and prior studies. This calls attention to the need for gender-sensitive behavioural interventions in school environments. Lastly, the study found no significant difference between family type and disruptive behaviour. This aligns with recent research suggesting that family structure, in isolation, may not be a strong determinant of adolescent behavioural outcomes. Instead, factors such as emotional support, supervision, and the quality of family relationships will likely have a more meaningful impact.

Conclusively, the findings of this study contribute to the literature in two important ways. First, within the Nigerian cultural settings, this study establishes that peer support and adjustment, often emphasised in Western research, may not exert the same protective influence in environments where disruptive behaviours are seen as the order of the day. Second, the findings highlight the importance of the school and family system as a buffer against disruptive behaviour, providing evidence that resilience is not merely interpersonal but ecological. This study further offers culturally grounded insights that can inform context-specific, school-based and family-focused interventions while enriching cross-cultural understandings of resilience in disruptive behaviour. Schools could implement teacher training programs to strengthen classroom management and supportive teacher–student relationships, given the protective role of school support. Peer mentoring and prosocial peer programs may help redirect peer influence away from disruptive behaviours and toward adaptive coping strategies. Additionally, parental involvement initiatives, such as workshops and home-school collaboration programs, could enhance family support, which emerged as a key predictor of reduced disruptive behaviour. These interventions reflect an ecological approach to resilience-building, aligning with Masten's [51] model by targeting multiple layers of influence to foster behavioural adjustment among adolescents.

6. Limitations and Suggestions for Future Research

There is no doubt that disruptive behaviour among adolescents remains a pressing issue within school systems, especially in densely populated urban regions like Lagos State. Our research found support for the relevance of this phenomenon, as several resilience-related factors were significantly related to disruptive behaviours among in-school adolescents. However, like all empirical studies, this research has limitations. One key limitation is that this study relied exclusively on adolescent self-reports, without incorporating perspectives from parents, teachers, or objective behavioural observations. The lack of multi-informant data may have introduced self-report bias and restricted the comprehensiveness of behavioural assessment. Multi-informant approaches are especially important in adolescent behavioural

research, as disruptive tendencies may manifest differently across home and school contexts. This limitation affects the generalizability of the findings and stresses the need for future studies to employ more robust, multi-method designs.

Another limitation is the geographical scope of the study, which focused exclusively on in-school adolescents. While Lagos represents a culturally diverse and socially complex population, its unique urban characteristics may not reflect the experiences of adolescents in rural or less-developed regions of Nigeria. As such, future research should expand the sample to include adolescents from other geopolitical zones and varied educational settings, including out-of-school youths to improve generalizability. Although the model was statistically significant, the explained variance was modest ($R^2 = 6.6\%$), indicating that resilience factors account for only a small portion of disruptive behaviour. This suggests that other ecological influences, such as peer dynamics, socio-economic stressors, school climate or coping strategies, may play a stronger role. Future research could adopt a more holistic model, examining how these other socio-ecological influences interact with resilience to shape adolescent behavioural outcomes.

Finally, the cross-sectional design of this study limits its ability to capture developmental changes or causal relationships. Longitudinal and mixed-method studies would be particularly valuable for tracing the evolution of resilience and behavioural adjustment over time. Such approaches can offer deeper insight into how early interventions or life events influence behavioural outcomes, and help identify the most effective strategies for fostering resilience and reducing disruption among Nigerian adolescents.

Statement of the Use of Generative AI and AI-Assisted Technologies in the Writing Process

The authors used ChatGPT and Grammarly tools during the writing of this manuscript to fine-tune the grammatical structures of the introduction and conclusion. After using this tool, the authors reviewed and edited the content as needed and take full responsibility for the content of the published article.

Acknowledgments

Our special appreciation goes to all the research participants who took their time to be part of this research, especially during the data collection phase. Also, to the Lagos State Education Sector, principals of the selected school and counsellors for their support.

Author Contributions

Conceptualization, T.E.O., A.A.A., Q.A.L., P.O.A. and K.M.B.; Methodology, T.E.O. and A.A.A.; Validation, A.A.A., Q.A.L., P.O.A. and K.M.B.; Formal Analysis, T.E.O.; Data Curation, T.E.O.; Writing—Original Draft Preparation, Q.A.L.; Writing—Review & Editing, T.E.O.; Supervision, A.A.A. and T.E.O.

Ethics Statement

The study involved human participants; as a result, regulatory ethics regarding human subjects were observed. Ethical approval was obtained from the Redeemer's University Ethical Review Board with reference number RUN/REC/2024/244 (31/08/2024). Furthermore, the researcher ensured that participants understood the research's purpose and that taking part in it would be completely voluntary. They were also assured that the information gleaned from this study would be used only for scholarly pursuits.

Informed Consent Statement

Due to the nature of our research participants, a written consent letter (assent) was obtained from the parents of the participant before our research.

Data Availability Statement

The dataset used for this study is available from the corresponding author upon request.

Funding

This research was not funded.

Declaration of Competing Interest

There is no competing interest.

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