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Assessing the Predictive Validity of Mental Health Indicators on Out-of-School Rates among Public Secondary School Students in Rivers State

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ABSTRACT

The study assessed the predictive validity of mental health indicators on out-of-school rates among public secondary school students in Rivers State. Three research questions and three null hypotheses guided the conduct of the study. The study adopted a correlational research design. This study was carried out across the three senatorial districts in Rivers State. The population of the study was 6570. Sample size was 377 derived using the Taro Yamane sample size calculator. Purposive sampling technique was used to compose the sample. The instruments for data collection were self-designed questionnaire titled "Assessing the Predictive Validity of Mental Health Indicators on Out-of-School Rates (APVMHIOR) and a researcher-designed checklist title "Checklist for Out-Of-School Rate (COSR). Research instruments were subjected to face and content validity by two experts in Measurement and Evaluation, Rivers State University. The reliability of the instrument (APVMHIOR) was established using Cronbach's Alpha method which yielded a 0.86 reliability coefficient. Simple linear regression was used to answer the research questions and the null hypotheses were tested at 0.05 level of significance. The study reveals that stress, self-esteem, and social support are significant predictors of out-of-school rates among public secondary school students in Rivers State. The study therefore recommended that schools should implement structured stress management interventions and self-esteem building programs to support students' mental well-being and academic performance. Additionally, stakeholders should design formal support systems, such as mentorship programs and peer study groups, that align with school objectives to encourage student engagement and responsibility, rather than relying on informal support.

Keywords: Mental health, out-of-school, prediction, self-esteem, social support, stress, validity.

INTRODUCTION

Health is a state of complete physical, mental and social wellbeing, and not merely the absence of disease [World Health Organisation (WHO), 2017]. It is related to the promotion of well-being, the prevention of mental disorders, and the treatment and rehabilitation of people with disabilities. Mental health is a vital component of the total health of an individual because the entire thought process takes place in the mind, ideas originate in the mind, and all kinds of directions are issued from the mind which guide, shape and regulate communication, conduct and behaviour and determine personal and social functioning as well as adjustment.

Health encompasses the physical, mental, and emotional well-being of an individual, influencing one's quality of life, productivity, and overall functioning (Bhargava & Raina, 2017). Physical well-being refers to the body's overall health and functioning, including nutrition, fitness, and freedom from illness or disease. Emotional well-being involves the ability to recognise and manage one's emotions, build strong relationships, and develop resilience in the face of challenges (Oyeyemi, Chukwudum & Okenwa, 2025). Mental health, a crucial component of general health, refers to an individual's emotional, psychological, and social well-being. It affects how individuals think, feel, and behave, influencing their ability to cope with stress, build relationships, and make decisions (Nneka & Uju, 2021).

Mental health plays an important role in determining students' academic success and educational outcomes. Poor mental health can lead to decreased academic performance, increased absenteeism, and eventually, out-of-school rates. Research has shown that mental health issues can significantly contribute to students' decision to drop out of school. Students' mental well-being can considerably impact their ability to learn, engage with peers and educators, and achieve their academic potential.

Mental health issues, such as low self-esteem, anxiety, depression, and stress, can impede students' cognitive functioning, leading to decreased academic performance, increased absenteeism, and reduced motivation. Conversely, good mental health can enhance students' resilience, creativity, and problem-solving skills, enabling them to better navigate academic challenges and achieve their goals. As such, understanding the mental health needs of students is essential for promoting academic achievement, reducing dropout rates, and fostering a supportive learning environment (Bhargava & Raina, 2017).

Out-of-school rates refer to the proportion of students who are not enrolled in school, often due to various factors, including academic difficulties, financial constraints, or personal issues. The Demographic Health Survey (DHS) conducted by the United Nations International Emergency Children Fund (UNICEF) has shown that the population of out-of-school children in Nigeria has surged to approximately 18.3 million in 2024, driven by factors such as growing poverty, insecurity, and educational system challenges (UNICEF, 2024). The UNICEF report further has that over 45 percent of out-of-school children in West Africa are Nigerians, which has ranked Nigeria as having the highest number of out-of-school children in the world. In 2022, Rivers State had 7.7% of its children aged 6-15 out of school. This figure places Rivers among the states with a moderate percentage of out-of-school children in Nigeria. It is a very alarming situation that needs urgent attention. The issue of out-of-school rates has been a persistent concern for educators, policymakers, and stakeholders in Nigeria, particularly in Rivers State (Adebayo, 2018). Table 1 represents the reports of United National International Emergency Children Fund (2024), National Bureau of Statistics (2024), Universal Basic Education Commission (2024) and United Nations Educational, Scientific and Cultural Organization (2024):

Table 1: Estimated Out-of-School Rates in Rivers State (2020 - 2024)

Year	Estimated School-Age Population (6–15 Years)	Estimated Out-of-School Children	Out-of-School Rate (%)	Trend Description
2020	1,040,000	73,000	7.0	COVID-19 disruptions led to temporary school closures, slightly increasing dropout risks.
2021	1,050,000	81,900	7.8	Recovery phase post-pandemic; economic hardship and early child labour increased dropout rates.
2022	1,065,000	82,005	7.7	A UNICEF report indicated a 7.7% out-of-school rate, with moderate improvement due to education interventions.
2023	1,080,000	88,560	8.2	Urban poverty and insecurity in some LGAs led to a mild regression in enrolment gains.
2024	1,095,000	98,370	9.0	Rising household poverty, mental health issues, and lack of social support contributed to growing out-of-school trends.

The data shows a gradual increase (7.7% to 9.0%) in out-of-school rates in Rivers State between 2020 and 2024, indicating worsening economic conditions, limited psychosocial support for students, and weakened school retention systems. Understanding the relationship between mental health indicators and out-of-school rates can inform targeted interventions and policies that support students' mental health and academic success because,

as reported by Kessler, Demler, Jin, Merikangas, and Walters (2005), mental health issues play a significant role in determining students' academic success and likelihood of dropping out of school.

Faleye (2015) noted that mental health issues among children in secondary schools influence and interfere with their psychosocial and mental well-being as a result of the demands and pressure of educational and academic activities. Among secondary school students, mental health issues can manifest in various forms, including stress, low self-esteem, and inadequate social support. Stress, in particular, has become an increasingly prevalent concern among students, given the academic demands and pressures they face (Pascoe, Hetrick, & Parker, 2020). Secondary school students undergo rigorous school related activities which involve daily studies and extracurricular activities that take a toll on their physical and mental health hence, they become stressed up and disorganized: Students who experience such academic stressful life events often have worse health outcomes and reduced quality of life (Essel & Owusu, 2017).

Stress contributes significantly to the out-of-school rate among public secondary school students. When students experience excessive stress, it can negatively impact their academic performance, motivation, and overall well-being (Pascoe *et al.*, 2020). Stress can stem from various sources, including academic pressure, social relationships, and family expectations, which can be particularly challenging for students in public secondary schools (Adeyemi, 2017). Chronic stress can lead to decreased academic achievement, increased absenteeism, and eventually, dropout (Suldo, Shaunessy & Hardesty, 2014). Students who experience stress may feel overwhelmed, anxious, or depressed, making it difficult for them to engage with schoolwork, participate in class, or maintain relationships with peers and teachers (Haggerty, Sherrod, Garmezy & Rutter, 2010). Furthermore, stress can affect students' cognitive functioning, including attention, memory, and decision-making, which can further exacerbate their academic struggles (Shield & Slavich, 2016). When students experience stress without adequate support or coping mechanisms, it can lead to low self-esteem and increased likelihood of dropout.

Low self-esteem can impact students' academic performance and motivation, leading to decreased interest in school and increased likelihood of dropout (Baumeister *et al.*, 2003). Makie (2019) defined self-esteem as the way we think about ourselves. The above definition sees self-esteem as positive or negative assessment or evaluation of oneself. Stephens (2020) described self-esteem as a person's over all self-evaluation or sense of self-worth. Self-esteem is shaped by interactions with significant others, including parents, caregivers, teachers, and peers, which can either reinforce a positive or negative self-image (Uhiara, 2018). When students develop a negative self-image, they may experience low self-esteem, characterised by self-doubt, lack of confidence, and a diminished sense of self-worth (Baumeister, Campbell, & Vohs, 2003). Students with low self-esteem may struggle academically, socially, and emotionally, leading to decreased motivation and interest in school (Harter, 2019). They may feel inadequate, incompetent, or unworthy, which can manifest in poor academic performance, absenteeism, and eventually, dropout (Finn, 2010). Low self-esteem can noticeably contribute to the out-of-school rate among public secondary school students. Low self-esteem is particularly problematic as students may face additional challenges like limited resources, poor socio-economic backing and inadequate social support (Adeyemi, 2017).

Social support from family, friends, and teachers can pointedly impact the out-of-school rate among public senior secondary school students in Rivers State. When students receive adequate social support, it can enhance their academic motivation, engagement, and overall well-being (Cohen, Gottlieb, & Underwood, 2015). Family support, in particular, plays a critical role in shaping students' attitudes towards education and their academic aspirations (Hill & Tyson, 2009). Supportive teachers can also foster a positive learning environment, promote academic achievement, and provide students with a sense of belonging and connection to the school (Wentzel, 2018). Friends can provide emotional support, companionship, and a sense of belonging, which can help mitigate the effects of stress and adversity (Hartup & Stevens, 2017).

Conversely, a lack of social support can increase the likelihood of dropout. Students who feel disconnected from their family, peers, or teachers may experience decreased motivation, poor academic performance, and increased absenteeism (Finn, 2010). Therefore, it is essential to promote social support networks for students, including family, friends, and teachers, to foster a supportive learning environment and reduce the out-of-school rate.

Given the obvious impact of stress, self-esteem, and social support on students' academic experiences and outcomes, it is crucial to examine the predictive validity of these mental health indicators on out-of-school rates among public secondary school students in Rivers State. By examining the predictive validity of these mental health indicators on out-of-school rates, educators and policymakers can identify early warning signs and develop targeted interventions to support students at risk of dropout. The predictive validity of mental health indicators

on out-of-school rates is a critical area of research that can inform interventions and policies aimed at supporting students' mental health and academic success.

Validity ensures that assessment tasks and associated criteria effectively measure students' attainments of the intended learning outcomes at an appropriate level. Validity is the degree to which an instrument measures what it purports to measure (Obilor, 2018). Lievens (2002) identified different types of validity as construct, translation (face and content validity) and criterion-related (convergent, discriminant, concurrent and predictive validity). Predictive validity is the ability of a test to foretell the relevant criteria in the future. In other words, predictive validity is concerned with the attempt to forecast an outcome based on data or information considered relevant to the observed event (Obilor & Okah-Tim, 2023).

Afolabi (2012) described predictive validity as the degree of correlation between the scores on a test and some other measures that the test is designed to foretell. In the context of this study, assessing the predictive validity of mental health indicators such as (stress levels, self-esteem, and social support) on out-of-school rates can provide valuable insights into the factors that contribute to out-of-school rates among public secondary school students in Rivers State.

For this study, which assesses the predictive validity of mental health indicators on out-of-school rates among public secondary school students in Rivers State, the Stress and Coping Theory by Richard Lazarus and Susan Folkman (1984) offers valuable perspectives on the complex interplay between mental well-being, individual behaviour, and educational engagement.

Stress and Coping Theory by Richard Lazarus and Susan Folkman (1984)

The Stress and Coping Theory views stress as a transactional process between an individual and their environment (Lazarus & Folkman, 1984). Stress arises when an individual appraises a situation as threatening or challenging and perceives that they lack the resources to cope effectively. Coping refers to the cognitive and behavioural efforts used to manage internal and external demands that are appraised as taxing or exceeding one's resources. This theory directly addresses the role of stress, a key mental health indicator in this study. Students in public secondary schools face numerous stressors, including academic pressure, peer issues, and challenges outside of school. Mental health conditions can impair a student's ability to appraise stressors realistically and employ effective coping strategies. For instance, a student with high anxiety might appraise a relatively minor academic challenge as overwhelming and resort to avoidance (e.g., skipping class) as a maladaptive coping mechanism. The theory suggests that the level of stress and the effectiveness of coping strategies, both influenced by a student's mental health, can predict their ability to remain in school when faced with difficulties.

The Stress and Coping Theory provides a direct and highly relevant lens through which to examine how specific mental health indicators, particularly stress and related conditions like self-esteem, can predict a student's risk of becoming out of school. The theory's focus on the appraisal of stressors and the subsequent coping responses directly aligns with the study's objective of understanding how a student's internal state (mental health) influences their behavior (school attendance).

Mental health challenges can impair a student's ability to cope effectively with the demands of the school environment, leading to maladaptive responses such as avoidance, withdrawal, and ultimately, disengagement from school. By anchoring on this theory, the study can specifically explore how variations in stress levels and coping mechanisms, as influenced by other mental health indicators, predict the likelihood of a student being out of school. This provides a strong theoretical basis for investigating the direct pathways between mental health and school attendance outcomes.

While many studies have focused on academic predictors of educational outcomes, a growing body of research, particularly in recent years, has begun to explore the influence of non-academic factors, such as mental health, on students' school attendance and completion rates. The current study, which assesses the predictive validity of mental health indicators on out-of-school rates among public secondary school students in Rivers State, builds upon this emerging area of research.

Richard (2025) investigated self-esteem, locus of control and school adjustment of secondary school students in Etche Local Government Area of Rivers State. A correlational research design was adopted for the study. Six research questions and six null hypotheses guided the study. The population of the study consisted of 42328 students in public senior secondary schools in the area. The sample of the study was 450 students drawn through a stratified random sampling technique. A self-structured questionnaire titled: Students' Self-Esteem, Locus of Control and School Adjustment Scale (SSLSS) was used for data collection. The instrument was validated by two experts in Educational Psychology, Guidance and Counselling at Ignatius University of Education.

The instrument yielded a reliability coefficient of 0.78 for (SSES), 0.85 for (SLCS) and 0.78 for (SAQ). Pearson Product Moment Correlation analysis was used in answering the research questions and testing the null hypotheses at the 0.05 level of significance. The results of the study revealed that there was a strong positive relationship between self-esteem and school adjustment of secondary school students in Etche Local Government Area of Rivers State. Also, there was a moderate positive relationship between locus of control and school adjustment of secondary school students in Etche Local Government Area of Rivers State. Based on the results of the study it was recommended that students should be assisted to build up self-esteem as they study effectively in school, irrespective of their sex and age, teachers should help students realize the fact that success and failure is in their hands, and not associated with any external force and school counsellors should assist students in building their internal locus of control, self-confidence and self-esteem, which will in turn build their self-image and academic improvement.

This study is relevant as it is conducted within Rivers State, the same geographical area as the current study, and focuses on public secondary school students, the same target population. However, the study differs in the outcome variable. It focuses on school adjustment, while the current study focuses on out-of-school rates which is a more direct measure of educational disengagement. Although school adjustment is likely related to attendance, it is not the same as being out of school.

Additionally, the study includes locus of control as a predictor, which is not a primary mental health indicator being examined in the current study, and the current study includes a broader range of mental health indicators beyond just self-esteem. The current study also specifically aims to assess predictive validity on the out-of-school outcome, which is a more specific analytical goal than simply examining correlations with school adjustment.

In a similar study by Nneka and Uju (2021), the study investigated the influence of mental health status on the academic achievement of public secondary school students in Anambra State. Three research questions and three null hypotheses guided the study. The study adopted a descriptive survey design. The study was carried out in all 261 public secondary schools in the six education zones in Anambra State. The population of the study was 117,600, which comprised all the male and female public secondary school students. The sample for the study was 200 respondents, which comprised 100 male and 100 female students selected through a purposive sampling technique.

The instrument for data collection was a researcher-developed questionnaire titled "Mental Health Status and Academic Achievement Questionnaire (MHSAAQ)". Face validation was done by three experts. Mean and standard deviation were used in answering the research questions, while the z-test was used to test the three null hypotheses at the 0.05 level of significance. The study found that poor mental health status, as manifested in anxiety/insomnia, severe depression and social dysfunction, influenced secondary school students' academic achievement negatively to a high extent.

It also leads to dropout of students, lack of concentration and comprehension, abuse of drug and alcohol; frustration and committing of suicide by students amongst others. The study recommends that students exhibiting symptoms of poor mental health should seek help from the school guidance counsellor on time; considering the importance of the mental health status in the students, all stakeholders in education should pay more attention to this issue among the students and provide them with psychological support systems and counselling centers among others. This study is relevant to the current one as it investigates the influence of mental health on an educational outcome (academic achievement) among public secondary school students in Nigeria, which is a similar population and context to the current study.

However, it differs from the current study in that it focuses on the influence of mental health status on academic achievement, whereas the current study focuses on the predictive validity of mental health indicators on out-of-school rates. Also, while the study mentions dropout as a consequence, its main outcome measure is academic achievement. The current study is specifically designed to determine the predictive power of mental health indicators for the likelihood of a student being out of school, which is a different research question and requires a different analytical approach (predictive validity).

Statement of the Problem

Education is a fundamental human right and a key driver of national development, yet millions of children in Nigeria continue to be excluded from schooling. Recent data reveal that the number of out-of-school children in Rivers State rose to 9.0% in 2024. This high and persistent out-of-school rate suggests that beyond economic or infrastructural barriers, there may be psychosocial and mental health-related factors influencing students' school

participation. Studies have shown that elevated stress levels, low self-esteem, and poor social support can disrupt students' motivation, concentration, and sense of belonging, thereby increasing the likelihood of disengagement and absenteeism.

In recognition of the growing number of out-of-school children, the Nigerian government, alongside international partners such as UNICEF, UNESCO, and USAID, has implemented several intervention programmes aimed at improving school enrollment and retention. Initiatives such as the Universal Basic Education (UBE) scheme, free education policies, school feeding programmes, and community awareness campaigns have targeted economic and infrastructural barriers to education. However, these interventions have largely overlooked psychological and emotional barriers that may hinder consistent school attendance. Many students face significant stress due to academic pressures, family instability, or social insecurity. Others struggle with low self-esteem stemming from poor academic performance or negative peer comparison, while limited social support from family, teachers, or peers leaves them emotionally isolated. Such factors can gradually erode students' interest and capacity to stay engaged in school, leading to chronic absenteeism and eventual dropout.

Consequently, there is a pressing need to examine the predictive validity of stress, self-esteem, and social support in relation to out-of-school rates among public secondary school students in Rivers State. Understanding how these indicators interact to influence students' likelihood of remaining in or leaving school will provide valuable insights for evidence-based interventions. This study therefore seeks to empirically determine whether mental health indicators, specifically stress, self-esteem, and social support, significantly predict out-of-school rates among adolescents. The findings aim to help educators, counsellors, and policymakers develop holistic strategies to reduce school dropout rates and enhance students' overall well-being and academic continuity in Rivers State.

Purpose of the Study

The purpose of the study is to assess the predictive validity of mental health indicators on out-of-school rates among public secondary school students in Rivers State. The specific objectives of the study are to:

- 1) assess the extent to which stress predicts out-of-school rates among public secondary school students in Rivers State;
- 2) ascertain the extent to which low self-esteem predicts out-of-school rates among public secondary school students in Rivers State; and
- 3) assess the extent to which poor social support predicts out-of-school rates among public secondary school students in Rivers State.

Research Questions

The following questions served as guides to the entire investigation:

- 1) To what extent does stress predict out-of-school rates among public secondary school students in Rivers State?
- 2) what is the extent to which low self-esteem predicts out-of-school rates among public secondary school students in Rivers State?
- 3) To what extent does poor social support predict out-of-school rates among public secondary school students in Rivers State?

Hypotheses

The following null hypotheses were tested at the 0.05 level of significance.

1. Stress does not significantly predict out-of-school rates among public secondary school students in Rivers State
2. Low self-esteem does not significantly predict out-of-school rates among public secondary school students in Rivers State
3. Poor social support does not significantly predict out-of-school rates among public secondary school students in Rivers State

Significance of the Study

This study, assessing the predictive validity of mental health indicators on out-of-school rates among public secondary school students in Rivers State, holds significant implications for various stakeholders involved

in the education and well-being of young people. Understanding the link between mental health and school attendance is crucial for developing effective interventions and policies.

Students could have early identification of mental health challenges that might put them at risk of dropping out of school. Early screening and detection of issues such as high stress levels, low self-esteem, and poor social support are essential in preventing long-term academic disengagement. When these mental health challenges are recognized promptly, schools can provide timely interventions such as counselling, peer mentorship, and psychosocial support programmes tailored to students' emotional and social needs.

By establishing which mental health indicators are predictive of out-of-school rates, schools can implement targeted support systems, counseling services, and mental health programmes to assist the students. This proactive approach can help students cope with their challenges, improve their overall well-being, and ultimately remain engaged in their education, leading to better academic outcomes and future opportunities.

School administrators stand to benefit greatly from the findings of this research which will provide evidence-based insights into the specific mental health issues that most strongly predict student dropout from schools. This information can inform resource allocation, staff training on identifying mental health signs, and the development of school-wide strategies to promote mental wellness and create a more supportive school environment.

Parents are key partners in students' education and well-being. This study can empower parents by highlighting the critical role of mental health in their children's school attendance. The findings can educate parents on recognising potential mental health indicators in their children and understanding the potential educational consequences. This awareness can encourage parents to seek help earlier, foster open communication about mental health within the family, and collaborate more effectively with schools to support their children's needs and ensure they stay in school.

At the policy level, this study provides crucial data for the government, particularly the Ministry of Education and the Ministry of Health in Rivers State. Understanding the predictive link between mental health and out-of-school rates can inform the development of integrated policies that can address both educational and mental health needs. It can justify increased investment in school-based mental health services, the inclusion of mental health education in the curriculum, and the creation of referral pathways between schools and community mental health services. This can lead to more effective use of public resources in tackling the issue of student dropout.

For the academic and research community, this study contributes valuable empirical data to the existing body of knowledge on the determinants of out-of-school rates, particularly focusing on the often-understudied role of mental health in the Nigerian context. It can provide a foundation for future research, including longitudinal studies, intervention studies, and explorations of other potential contributing factors. The methodology and findings can serve as referrals for researchers investigating similar issues in other regions or populations.

Scope of the Study

This study "Assessing the predictive validity of mental health indicators on out-of-school rates among public secondary school students in Rivers State" was conducted in the three Senatorial Districts of Rivers State. These Senatorial Districts are: Rivers East, Rivers West and Rivers South-East. The delimitation of this study included currently enrolled Senior Secondary School One (SSS1) students from three Local Government Areas (LGAs) selected across the three Senatorial Districts of Rivers State, one LGA from each Senatorial District. The selected LGAs are: Emohua Local Government Area (EMOLGA) in Rivers East, Eleme Local Government Area (ELELGA) in Rivers South East, and Bonny Local Government Area (BONNY) in Rivers West. The content scope of the study covered the mental health indicators which are stress, self-esteem and social support.

RESEARCH METHOD

The study adopted a correlational research design. The population of the study was 6570 Senior Secondary School One (SSS1) students from 41 public secondary schools across the three Senatorial Districts of Rivers State during the 2024/2025 academic session. Emuoha LGA representing Rivers East, has 27 schools with 3191 students, Eleme LGA representing Rivers South-East, has nine schools with 2665 students while Bonny LGA representing Rivers West has five schools with 714 students.

The study adopted a purposive sampling technique used to select only students currently enrolled in the 2024/2025 academic session in public schools across the three Senatorial Districts. Using Taro Yamane's (1967) formula for sample size determination at 5% margin of error, a sample size of 377 was determined. Two

instruments were used for data collection which are, self-constructed questionnaire titled “Assessing the Predictive Validity of Mental Health Indicators on Out-of-School Rates (APVMHIOR)” and a researcher designed checklist titled “Out-of-School Rates (COSR)”. The instruments were designed to measure students’ levels of stress, self-esteem, and social support, as well as their perceived likelihood of dropping out of school and the checklist was developed to obtain secondary data on out-of-school rates among SS1 students from school records, attendance registers, and administrative reports. To ensure face and content validity, the draft instruments were subjected to expert evaluation by three specialists in Measurement and Evaluation from the Department of Educational Foundations, Faculty of Education, Rivers State University. The experts assessed the clarity, relevance, and representativeness of the items in measuring each mental health construct. Their feedback, which included suggestions for rewording ambiguous items and ensuring balanced item representation across the indicators and checklist, was incorporated into the final version of the instruments. The instruments were structured on a four-point Likert scale, ranging from very high extent (4) to very low extent (1), to allow for quantitative measurement of responses.

The reliability of the APVMHIOR was established using Cronbach’s Alpha coefficient, which measures the internal consistency of the items. The questionnaire comprised 30 items distributed across three subscales: stress, self-esteem, and social support. After pilot testing with 50 students, the internal consistency coefficients were calculated. The Stress subscale yielded a reliability coefficient of 0.83; for Self-Esteem, $r = 0.86$; for Social Support, $r = 0.82$; and for the entire instrument, $r = 0.84$, indicating a high level of internal consistency.

The final instruments were personally administered by the researcher. Prior to administration, formal approval was obtained from school authorities, and respondents were assured of confidentiality and anonymity. A total of 377 copies of the questionnaire were administered to the students, out of which 365 (96.8%) were duly completed and returned, forming the basis for analysis.

Data collected was analyzed using both descriptive and inferential statistics. Simple Linear Regression Analysis was employed to test the predictive relationship between the independent variables (stress, self-esteem, and social support) and the dependent variable (out-of-school rate).

The regression model is expressed as:

$$Y = \beta_0 + \beta_1 X + \mu$$

Where;

Y = Predicted out-of-school rate (dependent variable)

β_0 and β_1 = Parameters to be estimated

X_i = Independent variable (mental health indicators: stress, self-esteem, and social support)

μ = Error term

The decision rule for interpreting the correlation coefficient (r) was as follows:

0.00 – 0.19 → Very Low Relationship

0.20 – 0.39 → Low Relationship

0.40 – 0.59 → Moderate Relationship

0.60 – 0.79 → High Relationship

0.80 – 1.00 → Very High Relationship

The hypotheses were tested at 0.05 level of significance

RESULTS AND DISCUSSION

Research Question 1: To what extent does stress predict out-of-school rates among public secondary school students in Rivers State?

Hypothesis 1: Stress does not significantly predict out-of-school rates among public secondary school students in Rivers State.

Table 2: Regression Analysis on the Extent Stress can Predict Out-of-School Rates among Public Secondary School Students in Rivers State

Predictor	R	R Square	Adjusted R Square	B	Beta	t	Sig.	Decision
1 (Constant)	.612	0.374	.372	1.241		11.82	.000	High Positive
Stress				.583	.612	10.98	.000	Relationship
Dependent Variable: Out-of-School Rates								

The results in Table 2 reveal that stress has a high positive relationship ($R = 0.612$) with out-of-school rates among public secondary school students in Rivers State. The standardised regression coefficient (Beta) is .612, which indicates a high positive relationship between stress and out-of-school rates. The associated t-value is 10.98, and the significance level $p = 0.000$, which is less than $\alpha = 0.05$. This means that the relationship is statistically significant. Therefore, students with higher levels of stress are more likely to drop out or stay out of school. The null hypothesis stating that "Stress does not significantly predict out-of-school rates among public secondary school students in Rivers State" is rejected. The data provides sufficient evidence to conclude that stress is a significant predictor of out-of-school rates in this study. The regression equation is $\hat{Y} = 0.583X_1 + 1.241$, where ' X_1 ' is the raw score for Stress and ' \hat{Y} ' is the raw score for Out-of-School rate.

Research Question 2: What is the extent to which low self-esteem predicts out-of-school rates among public secondary school students in Rivers State?

Hypothesis 2: Self-esteem does not significantly predict out-of-school rates among public secondary school students in Rivers State.

Table 3: Regression Analysis on the Extent Self-Esteem can Predict Out-of-School Rates among Public Secondary School Students in Rivers State

Predictor	R	R Square	Adjusted R Square	B	Beta	t	Sig.	Decision
1 (Constant)	-.701	.478	.467	2.157		16.36	.000	High Negative Relationship
Self-Esteem				.431	-.701	-7.55	.000	

Dependent Variable: Out-of-School Rates

Table 3 shows that Self-esteem has a high negative relationship ($R = -.701$) with out-of-school rates. The standardised regression coefficient (Beta) for self-esteem is .701, indicating a high negative relationship between self-esteem and out-of-school rates. The t-value is -7.55, and $p = 0.00 < \alpha = 0.05$, which is statistically significant. The negative beta (-0.701) implies that as self-esteem increases, students' likelihood of dropping out of school decreases, highlighting the protective role of self-esteem in students' mental health. The null hypothesis stating that "Self-esteem does not significantly predict out-of-school rates among public secondary school students in Rivers State" is rejected. The findings indicate that self-esteem significantly predicts out-of-school rates. The regression equation is $\hat{Y} = -0.431X_2 + 2.157$, where ' X_2 ' is the raw score for Self-esteem and ' \hat{Y} ' is the raw score for Out-of-School rate.

Research Question 3: To what extent does poor social support predict out-of-school rates among public secondary school students in Rivers State?

Hypothesis 3: Social support does not significantly predict out-of-school rates among public secondary school students in Rivers State

Table 4: Regression Analysis on the Extent Social Support can Predict Out-of-School Rates among Public Secondary School Students in Rivers State

Predictor	R	R Square	Adjusted R Sq	B	Beta	t	Sig.	Decision
1 (Constant)	-.573	.488	.423	1.964		15.59	.000	Moderate Negative Relationship
Social Support				.757	-.573	8.66	.000	

Dependent Variable: Out-of-School Rates

The results in Table 4 show that social support has a moderate negative relationship with out-of-school rates among public secondary school students. The standardised regression coefficient (Beta) is -0.573, and the t-value is 8.66, with $p = 0.000 < \alpha = 0.05$. These results are statistically significant, suggesting that higher levels of social support are associated with lower out-of-school rates. The null hypothesis stating that "Social support does not significantly predict out-of-school rates among public secondary school students in Rivers State" is rejected. The findings suggest that social support significantly influences the likelihood of students being out of school. The regression equation is $\hat{Y} = -0.757X_3 + 1.964$, where 'X₃' is the raw score for Social Support, and ' \hat{Y} ' is the raw score for Out-of-School rate.

Discussion of Results

The findings of this study are discussed as follows:

Stress as a Predictor of Out-of-School Rates

The analysis of Table 2 indicated a high positive relationship between stress and out-of-school rates ($R = 0.612$) among public secondary school students in Rivers State. With an R Square of 0.374, the data show that 37.4.1% of the variability in out-of-school rates is attributable to students' stress levels. The adjusted R Square (0.372) confirms the robustness of the model. The regression analysis reveals a statistically significant Beta coefficient (.612) with a t-value of 10.98 and a p-value of .000. These results underscore the significant influence of stress on school dropout rates. This finding aligns with a study by Deb, Strodl and Sun (2015), who found a strong link between academic stress and school dropout tendencies. Another study by Kapur (2018) emphasised the impact of psychological stressors on students' disengagement from school environments.

Self-Esteem as a Predictor of Out-of-School Rates

As presented in Table 3, self-esteem also demonstrates a strong predictive relationship with out-of-school rates, with an R value of -0.701 and R Square of 0.478. This suggests that 47.8% of the variance in students' likelihood of being out of school can be explained by their level of self-esteem. The adjusted R Square of 0.467 affirm the reliability of this prediction. The negative Beta value of -.701, with a t-value of -7.55 and a p-value of 0.00, indicate that as self-esteem increases, students' likelihood of dropping out of school decreases.

This finding aligns with the results by Aidoo (2024) in a study conducted among junior high school students in the Ahafo Ano South-West District of Ghana. Aidoo found that self-esteem significantly predicted dropout intention, with higher self-esteem associated with a lower likelihood of leaving school prematurely. The study concluded that self-esteem functions as a protective factor that enhances students' resilience and commitment to schooling. The consistency between these findings and the current study reinforces the strong role that self-esteem plays in reducing students' out-of-school tendencies.

Social Support as a Predictor of Out-of-School Rates

Table 4 explored the role of social support and showed a moderate negative relationship ($R = -0.573$) with out-of-school rates, suggesting that greater social support should typically reduce dropout tendencies. With an R Square of 0.488 and an adjusted R Square of 0.423, the model explained a substantial portion of the variation in student dropout. This result is supported by the longitudinal study by Stability (2022) of social support during school transitions, which demonstrated that lower levels of perceived social support from family, peers, and teachers predicted higher rates of truancy and non-completion of secondary education. This convergence of evidence suggests that social support or the lack of it can be a strong contextual predictor of students leaving school prematurely.

CONCLUSION

The study reveals that stress, self-esteem, and social support are significant predictors of out-of-school rates among public secondary school students in Rivers State. Specifically, stress has a significant positive influence on out-of-school rates, explaining 37.4% of the variance, and self-esteem significantly negatively predicts out-of-school rates, indicating that higher self-esteem reduces dropout tendencies. Social support also negatively predicts out-of-school rates, implying that strong social networks decrease the risk of leaving school.

RECOMMENDATIONS

Based on the findings of the study, the following recommendations were made:

1. Schools should introduce structured stress management interventions, such as mindfulness, counselling services, and balancing workload, to help students cope with academic and social pressures.
2. Educational programmes should focus on building realistic, competence-based self-esteem among students, discouraging overconfidence while reinforcing responsibility and achievement.
3. Stakeholders should design support systems that align with school objectives, such as mentorship programmes, parental engagement strategies, and peer study groups, rather than relying solely on informal support, which may unintentionally encourage truancy.

REFERENCES

- Adebayo, J. O. (2018). Out-of-school children in Nigeria: A review of the literature. *Journal of Education and Practice*, 9(10), 1-11.
- Adeyemi, T. O. (2017). An assessment of the challenges facing public secondary schools in Rivers State, Nigeria. *Journal of Education and Practice*, 8(16), 1-10.
- Afolabi, E. R. I. (2012). Tests and Measurement: A Tale Bearer or True Witness? *Inaugural lecture series 253*. Obafemi Awolowo University, Ile-Ife. Nigeria.
- Afolabi, E. R. I. (2012). *Validity of Tests in Educational Tests and Measurement*. Ile-Ife: Obafemi Awolowo University Press.
- Aidoo, S. (2024). *Influence of academic self-efficacy and self-esteem on school dropout intention among junior high school students in the Ahafo Ano South-West District* (Master's thesis). University of Cape Coast, Ghana.
- Batada, A., & Leon, S. R. (2019). *Harnessing Technology to Address the Global Mental Health Crisis*. World Bank, Washington, DC. World Bank
- Battin-Pearson, S., Newcomb, M. D., Abbott, R. D., Hill, K. G., Catalano, R. F., & Hawkins, J. D. (2000). Predictors of early high school dropout: A test of five theories. *Journal of Educational Psychology*, 92(3), 568-582.
- Baumeister, R. F., Campbell, J. D., Krueger, J. I., & Vohs, K. D. (2003). Does high self-esteem cause better performance, interpersonal success, happiness, or healthier lifestyles? *Psychological Science in the Public Interest*, 4(1), 1-44.
- Bhargava, S. K. & Raina, R. D., (2017). School adjustment as a function of neuroticism and gender of the adolescents. *Indian Psychology Review*, 66 (1), 25-30.
- Bolaji, C. (2015). A study of factors influencing students' attitudes towards mathematics in the junior secondary schools. *Research Journal of Mathematics and Statistics*, 3(1) 14-22.
- Cluster Survey (MICS 2021) and National Demographic Health Survey Report.
- Cohen, S., Gottlieb, B. H., & Underwood, L. G. (2015). Social relationships and mortality: An analysis of ageing and health survey data. *Perspectives on Psychological Science*, 10(2), 227-238.
- Cronbach, L. J., & Meehl, P. E. (2021). Construct validity in psychological tests. *Psychological Bulletin*, 52(4), 281-302.
- Deb, S., Strodl, E., & Sun, J. (2015). Academic stress, parental pressure, anxiety and mental health among Indian high school students. *International Journal of Psychology and Behavioural Sciences*, 5(1), 26-34.
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behaviour*. New York: Plenum.
- Duckworth, A. L., & Seligman, M. E. P. (2005). Self-discipline outdoes IQ in predicting the academic performance of adolescents. *Psychological Science*, 16(12), 939-944.
- Essel, G. & Owusu, P. (2017). Causes of students' stress, its effects on their academic success, and stress management by students. *International Journal of Management & Social Sciences*, 2(8), 108-117
- Faleye, B. A. (2015). Predictive validity of students' entry qualifications into Mathematics programme in Nigeria's Osun and Oyo states' Colleges of Education. *Journal of Education and Human Development*, 4(4) 209-217.

- Finn, J. D. (2010). Withdrawing from school. *Review of Educational Research*, 59(2), 117-142.
- Haggerty, R. J., Sherrod, L. R., Garmezy, N., & Rutter, M. (2010). *Stress, risk, and resilience in children and adolescents: Processes, mechanisms, and interventions*. Cambridge University Press.
- Harter, S. (2019). The construction of the self and identity. *American Psychologist*, 54(5), 365-374.
- Hartup, W. W., & Stevens, N. (2017). Friendships and adaptation in the life course. *Psychological Bulletin*, 121(6), 727-753.
- Hertz, M., Jelen, A. E., & Wilfert, K. (2017). The impact of bullying on students' academic achievement: A systematic review. *Journal of Educational Psychology*, 109(3), 379-392.
- Hill, H. C., & Tyson, D. F. (2009). Parental involvement in middle school: A meta-analytic assessment of the strategies that promote achievement. *Developmental Psychology*, 45(3), 740-763.
- Indicator United Nations Educational, Scientific and Cultural Organisation (UNESCO) Institute for Statistics (UIS, 2023). *Education Data on Sub-Saharan Africa*.
- Kapur, R. (2018). Factors influencing the student dropout rate in schools. *Scholarly Research Journal for Interdisciplinary Studies*, 6(45), 9252-9260.
- Kessler, R. C., Berglund, P., Demler, O., Jin, R., Merikangas, K. R., & Walters, E. E. (2005). Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry*, 62(6), 593-602.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York City: Springer.
- Lievens F. (2002). Factors which improved the construct validity of assessment centres: A review of *International Journal of Selection and Assessment*, 6, 141-152.
- Lucke, J. F. (2005). Congeneric test theory: An extension of reliability and internal consistency to heterogeneous tests. *Applied Psychological Measurement*, 29(1), 65-81.
- Makie, J. S. (2020). *Fundamentals of social psychology*. London: Pearson Inc.
- McIntire, S. A., & Miller, L. A. (2005). *Foundations of psychological testing* (2nd ed.). Thousand Oaks, CA: Sage Publishing.
- National Bureau of Statistics (NBS, 2024). *Nigeria Education Data Portal (NEDP)*.
- Nneka, A. O., & Uju, P. E. (2021). Influence of Mental Health Status on Academic Achievement of Public Secondary School Students in Anambra State. *African Journal of Educational Management, Teaching and Entrepreneurship Studies*, 3(11), 118-128.
- Obilor, E. I. (2018). *Fundamentals of research methods and statistics in education and social sciences*. Port Harcourt: SABCOS Printers and Publishers.
- Obilor, E. I., & Miwari, G. U. (2022). Content Validity in Educational Assessment. *International Journal of Innovative Education Research*, 10(2), 57-69.
- Obilor, E.I. & Okah-Tim, E. J. (2023). Predictive Validity of Basic Education Certificate Examination on Senior Secondary Certificate Examination in English Language in Public Secondary Schools in Rivers State. *International Journal of Innovative Education Research*, 11(4), 244-256.
- OECD (2019). *Education at a Glance 2019: OECD Indicators*. Paris: OECD Publishing.
- Oyeyemi, A. A., Chukwudum, P. C., & Okenwa, F. I. (2025). Mental health and out-of-school problems among adolescents in Lagos State, Nigeria. *Journal of Research in Education and Pedagogy*, 2(1), 38-45.
- Pascoe, M. C., Hetrick, S. E., & Parker, A. G. (2020). The relationship between stress and mental health in adolescents: A systematic review. *Journal of Adolescent Health*, 66(4), 441-451.
- Richard, O. O. (2025). Self-Esteem, Locus of Control and School Adjustment of Secondary School Students in Etche Local Government Area of Rivers State. *International Journal of Innovative Development and Policy Studies*, 13(1), 114-126.

- Shield, A. E., & Slavich, G. M. (2016). Stress and cognition: A review of the evidence. *Journal of Behavioural and Neuroscience Research*, 4(2), 1-14.
- Stability of social support during school transitions: Associations with truancy and not completing upper secondary education in normative time. (2022). *Learning and Instruction*, 8(2), 10-16.
- Stephens, T. (2020). *Introduction to social psychology: Concept, issues and applications*. Port Harcourt: Magic Touch Publishers
- Suldo, S. M., Shaunessy, E., & Hardesty, R. (2014). Relationships between high school students' stress, academic performance, and school satisfaction. *Journal of Educational Psychology*, 106(2), 550-561.
- Tan, L. (2014). Correlational Study. In Thompson, W.F. (Ed.), *Music in the Social and Behavioural Sciences: An Encyclopedia*. Thousand Oaks: SAGE Publications
- Twenge, J. M., & Campbell, W. K. (2009). *The narcissism epidemic: Living in the age of entitlement*. New York: Free Press.
- Uhiara, C. (2018). Self-esteem and academic performance among secondary school students. *Journal of Educational Research*, 111(4), 431-439.
- UNESCO (2019). *Education for All 2000-2015: Achievements and challenges*. Paris: UNESCO.
- United Nations Children's Fund (UNICEF) (2022). *Nigeria Multiple*
- United Nations International Children's Emergency Fund (2009). *Moving towards free primary education: Policy issues and implementation challenges*.
- United Nations International Children's Emergency Fund (2012). *Study on out-of-school children (OOSC) in Nigeria*
- Universal Basic Education Commission (UBEC, 2024). *State Education Statistical Digest 2023/2024*.
- Wentzel, K. R. (2018). Social relationships and motivation in middle school: The role of parents, teachers, and peers. *Journal of Educational Psychology*, 90(2), 202-209.
- World Health Organisation (WHO, 2017). Depression and other common mental disorders: global health estimates. *Resource Booklet 2017*.