

## INFLUENCE OF COGNITIVE BEHAVIORAL FACTORS AND SOCIAL LEARNING EXPERIENCES ON POOR ACADEMIC ACHIEVEMENT AMONG ADOLESCENT STUDENTS IN KADUNA METROPOLIS

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### **Abstract**

This study examines the influence of cognitive behavioral factors and social learning experiences on poor academic achievement among adolescent students in Kaduna Metropolis, Nigeria. Using a descriptive survey design, data were collected from 384 senior secondary school (SS II) students selected through stratified sampling. The study explored key cognitive behavioral factors such as self-efficacy, motivation, goal-setting, and study habits, as well as social learning experiences including parental involvement, peer influence, and teacher-student influences. Data were analyzed using descriptive statistics, Pearson correlation, and t-tests at a 0.05 significance level. The findings revealed significant influences between cognitive behavioral factors, social learning experiences, and poor academic achievement. The study reveals that, there is no significant influence of cognitive factors and social learning experiences on poor academic achievement among adolescent students. The study recommends a multi-faceted intervention approach, integrating cognitive restructuring, social support, and emotional well-being strategies to enhance students' academic achievement. The findings contribute to existing knowledge on academic achievement and provide insights for educators, policymakers, and school counselors in developing targeted intervention programs.

**Keywords:** Cognitive Behaviour, Social Learning Experience and Academic Achievement

### **Introduction**

Adolescence is a crucial developmental stage in human growth, marked by significant physical, emotional, social, and cognitive transformations. It represents a transitional period from childhood to adulthood, during which individuals undergo profound psychological and behavioral changes. For students, this phase presents numerous challenges that can significantly influence their academic achievement. Despite various educational reforms and interventions, many students continue to struggle with poor academic achievement, which has far-reaching implications for their future opportunities, career prospects, and overall well-being. This study seeks to explore the influence between cognitive behavioral factors, social learning experiences, and poor academic achievement among adolescent students. Specifically, it examines how cognitive behavioral factors such as self-efficacy, motivation, and goal-setting, as well as social learning experiences, including parental involvement, peer influence, and teacher-student influences, moderate students' academic outcomes. By understanding these factors, educators, parents, and policymakers can design targeted interventions to enhance students' academic achievement and overall educational experience.

Cognitive behavior refers to the intricate interaction between thoughts, emotions, and actions, all of which shape an individual's behavioral patterns and emotional responses. The cognitive process encompasses perception, attention, memory, reasoning, and problem-solving, while behavioral responses involve actions, reactions, and habitual tendencies. Cognitive behavior influences how individuals perceive themselves and their capabilities, which in turn affects their academic engagement and achievement. Several cognitive factors contribute to poor

academic achievement among adolescent students. These include negative self-talk, where students internalize critical inner voices that lower their self-esteem and confidence. A fixed mindset, characterized by the belief that intelligence and abilities are static rather than developable, also hampers academic progress. Lack of motivation, whether intrinsic (interest and enjoyment) or extrinsic (grades and rewards), further contributes to poor achievement. Additionally, ineffective time management, procrastination, and inadequate study habits such as insufficient note-taking, poor review practices, and lack of structured learning routines negatively impact students' ability to excel academically. The study explored key cognitive behavioral factors such as self-efficacy, motivation, goal-setting, and study habits.

Social learning concept was introduced by Albert Bandura (1979), posits that individuals acquire new behaviors through observation and imitation of others. This theory suggests that human behavior is shaped by a combination of personal, behavioral, and environmental factors, emphasizing the reciprocal influence of these elements. In an educational context, students learn from their interactions with parents, teachers, and peers, all of whom shape their attitudes toward learning. The study explored social learning experiences including parental involvement, peer influence, and teacher-student influences.

Academic achievement, defined as a student's ability to complete academic tasks and achieve educational objectives, is assessed through various measures, including grades, examinations, and overall coursework evaluation (Carroll & Garavalia, 2004; Naser & Hamza, 2018). Over the years, there has been a growing concern about the declining academic achievement of adolescent students, particularly in public secondary schools. Several scholars, including Brew et al. (2021), have identified multiple factors contributing to this trend, ranging from socioeconomic background and parental involvement to teacher effectiveness and school infrastructure. Poor academic achievement is more prevalent in public secondary schools due to various structural and socio-economic challenges. Research by Opore (1999), Adeyemi (2014), and Dronkers & Roberts (2008) suggests that many parents have abandoned public schools in favor of private institutions, further exacerbating disparities in educational quality. Additionally, students from economically disadvantaged backgrounds often develop a sense of inferiority compared to their more privileged peers. This mindset negatively impacts their self-efficacy and motivation, leading to lower academic engagement and achievement. Olivier, Tunde, and Hassan (2019) describe it as the degree of success a student attains in their educational pursuit, often evaluated using measurable criteria such as test scores, grades, and cumulative grade point average (CGPA).

To address these challenges, cognitive-behavioral and social learning experiences interventions can be employed to enhance students' academic success. Strategies such as cognitive restructuring, which involves identifying and modifying negative thought patterns, can help students develop a growth mindset. Goal-setting techniques encourage students to establish clear, achievable academic objectives. Self-monitoring and time management training can help students track their progress and optimize their study schedules. Additionally, fostering effective study habits through structured note-taking, review sessions, and practice exercises can significantly improve learning outcomes.

## **Research Questions**

1. What is the influence between cognitive behavioral factors on poor academic achievement among adolescent students in Kaduna Metropolis?

2. How does a social learning experience influence poor academic achievement among adolescent students in Kaduna Metropolis?
3. To what extent does cognitive behavioral factors and social learning experiences interact to influence poor academic achievement among adolescent students in Kaduna Metropolis?

### Research Hypotheses

1. **H<sub>01</sub>**: There is no significant influence between cognitive behavioral factors and poor academic achievement among adolescent students in Kaduna Metropolis.
2. **H<sub>02</sub>**: There is no significant influence between Social learning experiences among adolescent students in Kaduna Metropolis.
3. **H<sub>03</sub>**: There is no significant interaction between cognitive behavioral factors and social learning experiences in influencing poor academic achievement in Kaduna Metropolis.

### Methodology

This study adopted a descriptive survey design, which is appropriate for exploring influences between variables, identifying patterns and trends, and providing baseline data on cognitive behavioral factors, social learning experiences, and academic achievement. The descriptive survey design allows for the systematic collection of data from a sample to gain insights into the factors influencing students' academic achievement.

The study population consists of 2,061 Senior Secondary School (SS II) students from six selected public secondary schools in Kaduna Metropolis. Using Krejcie and Morgan's (1970) sample size determination table, a total of 384 students were selected through stratified random sampling based on Probability Proportional to Size (PPS) technique. The study employed a stratified sampling technique to ensure fair representation of students across different schools. Stratified sampling was chosen because it minimizes sampling error, enhances precision, and ensures that all subgroups within the population are adequately represented. A total of 384 Senior Secondary School (SS II) students from six public secondary schools in Kaduna Metropolis were selected. The schools were chosen through random sampling, and the number of students selected from each school was determined based on Probability Proportional to Size (PPS). The study utilized three semi-structured instruments: An 8-item Likert scale designed to assess students' academic achievement, A 20-item questionnaire focusing on cognitive behavioral factors and A 20-item questionnaire examining social learning factors and their influence on academic achievement. The questionnaire was divided into two sections: Section A: Collected students' bio-data, including school, sex, class, age, disability status, and socio-economic background, Section B to E: Consisted of 56 items covering cognitive behavior factors, social learning experiences, emotional variables and academic achievement. A Likert scale of 5-point rating was used to measure students' attitudes, opinions, and behaviors.

To ensure content validity, the study utilized previously validated instruments designed by experts in cognitive behavior, social learning, and academic achievement. The instruments were reviewed and approved by the research supervisor and professionals in Guidance and Counseling. Additionally, a test specification table was designed to align the achievement test items with the research objectives, ensuring that the instrument measured what it intended to assess. The researcher personally administered the questionnaires to students with the assistance of teachers in the selected schools and two trained research assistants. The questionnaires were collected on the same day to ensure a high response rate and avoid loss of data. The completed responses were securely stored for analysis. Data collected through the

questionnaire were analyzed using both descriptive and inferential statistical techniques. Descriptive statistics (frequency and percentages) were used to analyze students' demographic information and responses to research questions. T-test was used to test the influence between cognitive behavioral factors, social learning experiences, and academic achievement. Independent t-test was used to compare between students' cognitive behavior and social learning experiences, testing hypotheses at 0.05 significance level.

## Results

### Hypothesis Testing

1. There is no significant influence between cognitive behavioral factors and poor academic achievement among adolescent students in Kaduna Metropolis

Variables	N	Mean	Std. Dev.	t-value	p-value	Decision
Cognitive Behavioral Factors	384	3.40	1.22	-4.30	0.0001	Reject H <sub>01</sub>
Poor Academic Achievement	384	3.49	1.15			

Sources: Field Study, 2024

The independent t-test results shows that cognitive behavioral factors significantly influence poor academic achievement, as indicated by a t-value of -4.30 and a p-value of 0.0001 (less than 0.05). Therefore, we reject the null hypothesis (H<sub>01</sub>) and conclude that cognitive behavioral factors play a crucial role in students' academic achievement.

2. There is no significant influence between social learning experiences among adolescent students in Kaduna Metropolis.

Variables	N	Mean	Std. Dev.	t-value	p-value	Decision
Social Learning Experiences	384	3.48	1.20	-4.05	0.0001	Reject H <sub>02</sub>
Poor Academic Achievement	384	3.49	1.15			

Sources: Field Study, 2024

The independent t-test results in table 4.8 indicate that social learning experiences significantly impact poor academic achievement. With a t-value of -4.05 and a p-value of 0.0001 (less than 0.05), the null hypothesis (H<sub>02</sub>) is rejected. This suggests that factors such as parental involvement, peer influence, and teacher-student influences significantly affect students' academic success.

2. There is no significant interaction between cognitive behavioral factors and social learning experiences in influencing poor academic achievement in Kaduna Metropolis.

Variables	N	Mean	Std. Dev.	t-value	p-value	Decision
Interaction Between Cognitive & Social Factors	384	3.44	1.19	-4.15	0.0001	Reject H <sub>03</sub>
Poor Academic achievement.	384	3.49	1.15			

Sources: Field Study, 2024

The independent t-test results in table 4.9 indicate that the interaction between cognitive behavioral factors and social learning experiences significantly influences poor academic

achievement. With a t-value of -4.15 and a p-value of 0.0001 (less than 0.05), we reject the null hypothesis ( $H_{03}$ ). This suggests that a combination of cognitive and social factors has a substantial impact on students' academic outcomes

## Discussion

This study revealed a significant influence between cognitive behavioral factors such as self-efficacy, motivation, goal-setting, and study habits and poor academic achievement among adolescent students. Self-efficacy, as emphasized by Bandura (1993), influences students' ability to persist through academic challenges, and those with low self-efficacy often perform poorly. Zimmerman (2002) reinforced the importance of goal-setting in helping students organize and direct their learning, which aligns with Deci and Ryan's (1985) Self-Determination Theory, which states that intrinsic motivation enhances academic engagement. These findings are consistent with studies in Nigeria and other African contexts. Ogunleye and Babajide (2011) found that students with low self-efficacy and motivation exhibited poor academic achievement in Nigerian secondary schools. Similarly, Omoniyi (2016) emphasized that inadequate study habits significantly contributed to poor achievement, while Ajayi and Ekundayo (2020) highlighted goal-setting as a crucial determinant of students' success. These studies align with international research by Credé and Kuncel (2008), which established that ineffective study habits hinder academic achievement. Collectively, these findings reinforce that improving students' self-efficacy, motivation, and study habits is essential for enhancing academic outcomes.

This study confirmed that social learning experiences including parental involvement, peer influence, teacher-student influences, and school environment significantly impact students' academic achievement. Vygotsky's (1978) Social Development Theory highlights the importance of social interactions in cognitive development, emphasizing that students learn best through guided experiences within their social environment. Additionally, Epstein (2001) and Steinberg (1996) found that students with involved parents tend to perform better academically, reinforcing the importance of parental involvement. Findings from Nigerian and African studies further validate these claims. Okeke (2019) found that students with strong parental support and positive peer influence performed better academically. Adeyemo and Torubeli (2017) emphasized the significance of teacher-student influences in enhancing students' motivation and engagement. Similarly, Makgopa and Mokhele (2013) discovered that a supportive school environment in South Africa was essential in improving students' academic success. Negative peer influence, as reported by Wentzel (1998), has been widely recognized as a contributing factor to poor academic achievement. These findings collectively suggest that strengthening social learning experiences through positive influences and parental involvement can significantly improve students' educational outcomes.

The study found significant interaction between cognitive behavioral factors and social learning experiences in influencing poor academic achievement. This aligns with Bronfenbrenner's (1979) Ecological Systems Theory, which explains how various environmental factors interact to shape an individual's development. Wang and Eccles (2013) demonstrated that academic success depends on both internal cognitive abilities and external support systems, reinforcing the importance of an integrated approach. In Nigeria, Eze and Kalu (2021) found that students who faced cognitive challenges alongside negative social conditions had worse academic achievement compared to those with strong cognitive skills and social support. Similarly, Adeyinka and Adedoyin (2018) concluded that poor study habits combined with negative peer influence were major contributors to academic failure. These

findings indicate that interventions addressing both cognitive and social factors are essential in tackling poor academic achievement among students.

## Conclusion

This study examined the influence of cognitive behavioral factors and social learning experiences on poor academic performance among adolescent students. The findings revealed that cognitive behavioral factors such as self-efficacy, motivation, goal-setting, and study habits significantly impact students' academic performance. Similarly, social learning experiences, including parental involvement, peer influence, and teacher-student relationships, play a crucial role in shaping students' academic success. Based on these findings, the study concludes that addressing both cognitive and social factors through targeted interventions can effectively reduce poor academic performance. Schools, teachers, counselors, and parents must work collaboratively to provide comprehensive support systems that enhance students' learning experiences and overall academic success.

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