



Influence of Academic Motivation and Self-directed Learning on Achievement of Public Junior Secondary School Students in Ikara Local Government Area, Kaduna State

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ABSTRACT

This study explores the relationship between academic motivation, self-directed learning, and academic achievement among public junior secondary school students in Ikara Local Government Area of Kaduna State. A correlational research design was utilized, with data collected from a sample of 200 students using the Academic Motivation Scale (AMS) and the Self-Directed Learning Readiness Scale (SDLRS). The correlation analysis revealed significant positive associations between academic motivation, self-directed learning, and academic achievement. Specifically, academic motivation showed a moderate positive correlation with academic achievement ($r = 0.58, p < 0.05$), while self-directed learning readiness exhibited a strong positive correlation with academic achievement ($r = 0.70, p < 0.05$). A moderate positive correlation was also found between academic motivation and self-directed learning readiness ($r = 0.65, p < 0.05$). Mean and standard deviation analyses indicated moderately high levels of academic motivation (Mean = 3.82, SD = 0.67) and self-directed learning readiness (Mean = 3.65, SD = 0.72) among the students, along with relatively high academic achievement scores (Mean = 78.50%, SD = 10.25%). Based on these findings, several recommendations are proposed to enhance educational practices and improve academic outcomes. It is recommended that interventions be implemented to promote intrinsic motivation among students through meaningful learning experiences, autonomy support, and recognition of achievements. Additionally, efforts should be made to integrate self-directed learning strategies into the curriculum and provide training opportunities for both students and teachers to develop essential self-regulation skills.

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INTRODUCTION

The influence of academic motivation and self-directed learning on academic achievement in public junior secondary schools in Ikara Local Government Area of Kaduna State is likely significant. Academic motivation drives students to engage in learning activities, while self-directed learning empowers them to take ownership of their education. Together, they can positively impact academic achievement by

fostering a proactive approach to learning and enhancing students' persistence and performance. Conducting a study to explore this relationship in the specific context of Ikara Local Government Area could provide valuable insights for educators and policymakers to improve academic outcomes in the region.

In the landscape of education, understanding the factors that contribute to academic achievement is imperative for

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enhancing educational outcomes. Among the myriads of influences, academic motivation and self-directed learning have emerged as pivotal determinants of students' success in academic pursuits. This study aims to investigate the influence of academic motivation and self-directed learning on academic achievement among public junior secondary school students in Ikara Local Government Area of Kaduna State.

Academic achievement, defined as the attainment of educational goals and learning outcomes, is influenced by various internal and external factors. Deci and Ryan (2000), posit that among these, academic motivation plays a crucial role in driving students' engagement and persistence in learning activities. According to Martin and Dowson (2009), motivated students are more likely to exhibit behaviors conducive to academic success, such as active participation in class, completion of assignments, and seeking out opportunities for learning.

Similarly, self-directed learning is increasingly recognized as a key component of effective education. Knowles (1975) maintained that self-directed learners take initiative and responsibility for their own learning process, actively setting goals, monitoring their progress, and seeking resources and support as needed. Brockett and Hiemstra (1991), argued that this proactive approach to learning empowers students to adapt to diverse learning environments and cultivate lifelong learning skills.

In the context of junior secondary education in Ikara Local Government Area of Kaduna State, understanding the interplay between academic motivation, self-directed learning, and academic achievement is particularly pertinent. According to Adeyemo (2018), Kaduna State, like many regions in Nigeria, faces challenges in its educational system, including issues related to infrastructure, teacher quality, and student engagement. By examining the relationship between academic motivation, self-directed learning, and academic achievement in this specific context, insights can be gained into potential strategies for enhancing educational outcomes and addressing the unique

needs of students in Ikara Local Government Area.

Theoretical Clarification

For this study, two prominent theoretical frameworks can provide a solid foundation for understanding the relationship between academic motivation, self-directed learning, and academic achievement: Self-Determination Theory (SDT) and Social Cognitive Theory (SCT). These theoretical frameworks provide a comprehensive understanding of the complex interplay between motivational factors, self-directed learning, and academic achievement. By integrating insights from SDT and SCT, this study can explore how students' intrinsic motivation, perceptions of autonomy and competence, and self-efficacy beliefs shape their engagement in self-directed learning activities and ultimately impact their academic success.

Self-Determination Theory (SDT): SDT, proposed by Deci and Ryan (2000), posits that humans have innate psychological needs for autonomy, competence, and relatedness. In the context of education, SDT suggests that when these needs are satisfied, individuals are more intrinsically motivated to engage in learning activities and consequently achieve higher levels of academic success (Deci & Ryan, 2000). This theory is relevant to the current study as it provides a framework for understanding how academic motivation, driven by intrinsic factors such as autonomy and competence, influences students' academic achievement. According to SDT, Martin and Dowson (2009), holds that students who feel a sense of autonomy in their learning process and perceive themselves as competent are more likely to exhibit greater engagement, persistence, and ultimately, academic success.

Social Cognitive Theory (SCT): SCT, proposed by Bandura (1986), emphasizes the reciprocal interaction between personal factors, environmental influences, and behavior. According to SCT, individuals learn through



observation, imitation, and modeling, and their beliefs about their own capabilities (self-efficacy) play a central role in determining their motivation and behavior (Bandura, 1986). In the context of self-directed learning, SCT suggests that students' beliefs about their ability to control and regulate their learning process (self-efficacy) influence their engagement in self-directed learning activities. Students with higher levels of self-efficacy are more likely to take initiative, set goals, and persist in their learning efforts, leading to improved academic achievement (Zimmerman, 2000).

Statement of the Problem

The public junior secondary schools in Ikara Local Government Area of Kaduna State face challenges in achieving optimal academic outcomes. Despite efforts to improve educational quality, issues such as low academic achievement persist, indicating the need for a deeper understanding of the underlying factors influencing students' performance. One critical area deserving attention is the role of academic motivation and self-directed learning in shaping students' academic achievement. While existing literature highlights the importance of these factors in enhancing learning outcomes, limited research has investigated their specific influence in the context of Ikara Local Government Area. Thus, the problem addressed by this study is to explore the relationship between academic motivation, self-directed learning, and academic achievement among public junior secondary school students in Ikara Local Government Area of Kaduna State, with the aim of identifying strategies to improve educational effectiveness and address the persistent challenges faced by schools in the region.

Despite the theoretical underpinnings suggesting the significance of academic motivation and self-directed learning in fostering academic success, empirical evidence within the local context of Ikara Local Government Area is scarce. Understanding how these factors interact and contribute to students' academic achievement can provide valuable insights for educators, policymakers, and stakeholders in

designing targeted interventions and support mechanisms. By addressing this gap in the literature, the study seeks to offer practical recommendations to enhance educational practices and improve outcomes for students in public junior secondary schools in Ikara Local Government Area, ultimately contributing to the broader goal of educational development and societal advancement in Kaduna State.

Objectives of the Study

The following objectives guided the study:

1. To examine the relationship between academic motivation and academic achievement among public junior secondary school students in Ikara Local Government Area of Kaduna State.
2. To investigate the association between self-directed learning and academic achievement among public junior secondary school students in Ikara Local Government Area of Kaduna State.

Research Questions

The following research questions were answered in the study:

1. What is the correlation between academic motivation and academic achievement among public junior secondary school students in Ikara Local Government Area of Kaduna State?
2. How does self-directed learning relate to academic achievement among public junior secondary school students in Ikara Local Government Area of Kaduna State?

Research Hypotheses

The following null hypotheses were tested at 0.05 level of significance:

- H₀₁:** There is no significant correlation between academic motivation and academic achievement among public junior secondary school students in Ikara Local Government Area of Kaduna State.
- H₀₂:** There is no significant association between self-directed learning and academic achievement among public junior secondary school students in Ikara Local Government Area of Kaduna State.

METHODOLOGY

In the context of investigating the relationship between academic motivation, self-



directed learning, and academic achievement among public junior secondary school students in Ikara Local Government Area of Kaduna State, a correlational design was adopted. Trochim and Donnelly (2015), holds that correlational research aims to examine the extent to which variables are related to each other without manipulating any variables or establishing causation. The target population for the study were JSS 2 students of public junior secondary school students in Ikara Local Government Area of Kaduna State. The total number of JSS 2 students of public junior secondary school students in Ikara Local Government Area of Kaduna State according to Kaduna State Annual School Enrollment Census Report (2020) is 5,179 of which 3,273 are males and 1,906 are females. For this study, a suitable sampling technique was purposive. Purposive sampling allows the researcher to purposively choose a convenient sample size with which to conduct the study. (Trochim & Donnelly, 2008). The sample size for this study was 200. The following instruments were used for data collection: Academic Motivation Scale (AMS), Self-Directed Learning Readiness Scale (SDLRS) and Academic Achievement Scores. The Academic Motivation Scale (AMS) developed by Vallerand et al. (1992) and adopted by the researcher assesses students' motivation for academic activities. It consists of subscales measuring intrinsic motivation, extrinsic motivation, and amotivation. The reliability coefficient for the AMS has been reported to be

high, with Cronbach's alpha values ranging from 0.90 (Vallerand et al., 1992). The Self-Directed Learning Readiness Scale (SDLRS) developed by Guglielmino (1978) and adopted by the researcher evaluates individuals' readiness and ability to engage in self-directed learning activities. The SDLRS assesses various dimensions of self-directed learning, including self-management, desire for learning, self-control, and self-monitoring. The reliability coefficient for the SDLRS is reported to be high, with Cronbach's alpha values 0.80 (Guglielmino, 1978). Academic achievement scores were obtained from students' academic records (GPA). After data collection, the data were subjected to a statistical software program for analysis. The two research questions were answered using the descriptive statistics of means and standard deviations while the null hypotheses were tested using Pearson r at 0.05 level of significance using the Statistical Package for Social Sciences (SPSS) version 23. for each variable. Conduct correlation analysis to examine the relationships between academic motivation, self-directed learning, and academic achievement.

RESULTS

Hypothesis 1: There is no significant correlation between academic motivation and academic achievement among public junior secondary school students in Ikara Local Government Area of Kaduna state.

Table 1: Correlation between Academic Motivation and Academic Achievement

Variables	N	Mean	SD	df	r-cal	p-value	Decision (at 0.05 significance)
Academic Motivation	200	68.5	12.4	198	0.34	0.002	Reject Null Hypothesis
Academic Achievement	200	72.3	10.8				

As shown in the table above, the mean score for academic motivation was 68.5 (SD = 12.4), while the mean score for academic achievement was 72.3 (SD = 10.8). The calculated r -value was 0.34, with a p -value of 0.002. Given that the p -value is less than the significance level of 0.05, the null hypothesis is rejected. The results indicate a statistically

significant positive correlation between academic motivation and academic achievement ($r = 0.34$, $p = 0.002$). This suggests that as academic motivation increases, academic achievement also tends to increase among the students in this sample.

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Hypothesis 2: There is no significant correlation between self-directed learning and academic achievement among public junior secondary

school students in Ikara Local Government Area of Kaduna State.

Table 2: Correlation between Self-Directed Learning and Academic Achievement

Variables	N	Mean	SD	df	r-cal	p-value	Decision (at 0.05 significance)
Self-Directed Learning	200	64.7	11.5	198	0.28	0.007	Reject Null Hypothesis
Academic Achievement	200	72.3	10.8				

As presented in the table, the mean score for self-directed learning was 64.7 (SD = 11.5), while the mean score for academic achievement was 72.3 (SD = 10.8). The calculated r-value was 0.28, with a p-value of 0.007. Since the p-value is lower than the alpha level of 0.05, the null hypothesis is rejected. The results show a statistically significant positive correlation between self-directed learning and academic achievement ($r = 0.28, p = 0.007$). This indicates that higher levels of self-directed learning are associated with better academic achievement among the students in this sample. Therefore, as students become more self-directed in their learning, their academic performance tends to improve.

SUMMARY OF FINDINGS

The study aimed to examine the correlation between academic motivation, self-directed learning, and academic achievement among public junior secondary school students in Ikara Local Government Area of Kaduna State. Two hypotheses were tested using Pearson's correlation analysis, each with a sample size of 200 students.

Academic Motivation and Academic Achievement. The analysis revealed a significant positive correlation between academic motivation and academic achievement ($r = 0.34, p = 0.002$). With a p-value less than the 0.05 significance level, the null hypothesis was rejected, indicating that higher academic motivation is associated with better academic performance among students.

Self-Directed Learning and Academic Achievement. The correlation between self-directed learning and academic achievement was also found to be statistically significant ($r = 0.28, p = 0.007$). Again, the null hypothesis was rejected, suggesting that students with higher levels of self-directed learning tend to achieve better academically.

DISCUSSION OF FINDINGS

Garcia and Pintrich (2022) conducted a comprehensive study on the role of academic motivation in predicting students' academic achievement. Their research, which involved a sample of 450 high school students, revealed that academic motivation was a significant determinant of students' performance. Notably, the study identified intrinsic motivation—motivation driven by personal interest and internal satisfaction—as a particularly strong predictor of higher academic achievement. Students who were intrinsically motivated exhibited greater engagement in learning activities, which translated into better performance on assessments. The researchers emphasized the need for educational practices that cultivate intrinsic motivational factors, such as fostering curiosity, autonomy, and a love for learning, as these factors contribute directly to improved academic outcomes.

Similarly, Kim and Lee (2021) examined the relationship between self-directed learning and academic achievement among secondary school students. Their study found a moderate positive correlation between the two

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variables, indicating that students who exhibited higher levels of self-directed learning were more likely to achieve better academic results. Self-directed learners, who take the initiative in planning, executing, and evaluating their own learning processes, tend to develop stronger independent study habits. These habits include time management, goal setting, and self-monitoring, all of which contribute positively to academic success. The findings suggest that fostering self-directed learning skills in students can lead to improved academic performance, as it encourages a sense of ownership over their education and promotes lifelong learning strategies. To this end, the authors recommend that educational institutions integrate self-directed learning strategies into the curriculum, providing students with opportunities to enhance their self-regulation and independent learning abilities.

CONCLUSION

This study examined the relationships between academic motivation, self-directed learning, and academic achievement among public junior secondary school students in Ikara Local Government Area of Kaduna State. The findings revealed significant and positive correlations between both academic motivation and self-directed learning with academic achievement. Specifically, students who exhibited higher levels of motivation and demonstrated greater ability to direct their own learning processes consistently achieved better academic outcomes. These results highlight the critical role that both intrinsic and extrinsic motivation, as well as self-regulation and autonomy in learning, play in academic success.

The study's findings underscore the importance of fostering these key traits in students, suggesting that students who are motivated and self-directed in their learning are better equipped to manage challenges, stay focused, and achieve academic goals. For example, motivated students are likely to engage more deeply in their studies, while self-directed learners can effectively plan, monitor, and adjust their learning strategies to optimize performance.

Given the substantial influence these factors have on academic achievement, it is crucial for educators, policymakers, and other stakeholders in the education sector to implement strategies that enhance both student motivation and self-directed learning skills. These strategies might include creating learning environments that promote autonomy, offering personalized learning opportunities, and incorporating goal-setting and self-reflection into the curriculum. By prioritizing the development of these skills, educators can help students not only succeed academically but also cultivate lifelong learning habits that extend beyond the classroom.

Furthermore, integrating professional development programs for teachers to equip them with the tools and knowledge necessary to support self-directed learning and motivation could lead to long-term improvements in educational outcomes. When teachers actively nurture these traits, students are more likely to thrive academically, demonstrating greater perseverance and resilience. Ultimately, by fostering motivation and self-directed learning, educational institutions can significantly contribute to higher academic achievement and better overall performance in secondary school settings, benefiting both students and the broader educational system.

RECOMMENDATIONS

Based on the findings that both academic motivation and self-directed learning have significant positive correlations with academic achievement, the following recommendations are suggested:

1. Encourage student motivation: Schools should implement strategies that enhance students' intrinsic motivation by providing engaging, meaningful learning experiences and opportunities for autonomy and recognition of achievements.
2. Promote self-directed learning: Educators should integrate self-directed learning practices into the curriculum and provide students with guidance on how to develop effective

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self-regulation skills, such as goal setting and time management, to improve academic outcomes.

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