Section 9. Social psychology

ACHIEVEMENT MOTIVATION AND ACADEMIC ACHIEVEMENT AMONG SECONDARY SCHOOL STUDENTS

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Abstract

This study investigated the relationship between achievement motivation and academic achievement among secondary school students in Delta State, Nigeria. Employing a descriptive survey research design. A sample of 192 students was selected using a sample size calculator with confidence level parameters Data collection relied on a questionnaire. The collected data underwent statistical analysis, including structural equation modeling for hypothesis testing and descriptive analysis for calculating means and standard deviations. The study's findings revealed a significant relationship between achievement motivation and the academic achievement of secondary school students. Furthermore, gender was found to have no significant mediating effect on the relationship between achievement motivation and academic achievement among these students. Conversely, socio-economic status displayed a significant mediating influence on the connection between achievement motivation and academic achievement. In light of these findings, the study offers recommendations for educational institutions and policymakers to consider programs and initiatives that promote and enhance achievement motivation among students.

Keywords: *Achievement Motivation (AM), Academic Achievement (AA), gender (GR), socioeconomic status (SES)*

Introduction

Education is a fundamental pillar of socioeconomic development, and the academic performance of secondary school students plays a pivotal role in shaping the future of any nation. In Nigeria, a country characterized by its rich cultural diversity and rapidly growing population, the quality of education

is of paramount concern. Delta State, located in the southern region of Nigeria, is no exception to this educational discourse. The state is home to numerous secondary schools, where students strive to achieve academic excellence. Recent data (UNESCO, 2020) has highlighted both progress and challenges within the Nigerian education system, underscoring the importance of exploring factors influencing academic achievement. Academic achievement in Nigeria, as in many countries, is influenced by a complex interplay of factors. One such factor that influences academic achievement is achievement motivation.

Achievement motivation, a psychological construct referring to the desire or drive to succeed, has garnered significant attention in the field of education (Eccles & Wigfield, 2020). It plays a pivotal role in students' engagement with their studies and their pursuit of academic success. Recent studies (Wentzel, 2021) have recognized the nuanced nature of achievement motivation, highlighting its multifaceted components, such as intrinsic and extrinsic motivation, and the impact of sociocultural factors on motivation levels. Understanding how achievement motivation operates in the context of secondary education crucial for educators and policymakers.

Gender has been recognized as a significant factor influencing achievement motivation and academic achievement among secondary school students. A recent study by Hyde, Bigler, Joel, Tate, and van Anders (2019) highlights the ongoing gender gap in certain academic domains, such as mathematics and science. Efforts to address gender-related disparities in achievement motivation and academic achievement should take into account the dynamic nature of gender roles and identities. A more recent study by Else-Quest, Hyde, and Linn (2010) highlights that the gender gap in mathematics performance has been narrowing over the years, indicating that social and educational changes can positively impact gender-related differences. Additionally, research by Good et al. (2019) underscores the importance of fostering a growth mindset, which can empower students of all genders to develop their motivation, embrace challenges, and excel academically.

Socioeconomic status has been identified as a critical factor influencing achievement motivation and academic performance among secondary school students. Recent research by Reardon, Kalogrides, and Shores (2019) highlights the persistent achievement gap in the United States, with students from lower SES backgrounds often facing disadvantages in academic outcomes. Efforts to address the influence of socioeconomic status on achievement motivation and academic achievement should focus on reducing disparities in access to resources and opportunities. A more recent study by Bailey and Dynarski (2011) suggests that targeted interventions, such as financial aid programs and educational support services, can help mitigate the impact of SES on academic achievement. Moreover, fostering a growth mindset and resilience can empower students from diverse socioeconomic backgrounds to develop strong motivation, overcome challenges, and succeed academically (Yeager & Dweck, 2012).

Collectively, the empirical research support the importance of achievement motivation in influencing secondary school students' academic success. They provide insightful information about the different elements, such as self-concept, gender, SES on achievement motivation, and academic achievement among secondary school students. They emphasize the need for comprehensive strategies in education that consider the intersectionality of these factors to foster a supportive and inclusive learning environment. This study tends to address the knowledge gaps, nuanced and holistic understanding of how achievement motivation, gender, SES, and motivation intersect and impact academic achievement among secondary school students, ultimately contributing to the development of more targeted interventions and policies to promote educational equity and student success.

Hypotheses

– There is no significant relationship between Achievement Motivation and academic achievement among secondary schools students.

– There is no significant mediation of gender on the relationship between Achievement motivation and academic achievement among secondary schools students.

– There is no significant mediation of socioeconomic status on relationship between Achievement motivation and academic achievement among secondary school students.

Method

The research study employed a descriptive survey design as its overarching methodology. Utilizing a sample size calculator with specified confidence interval and confidence level parameters, the study determined that a minimum of 192 samples was required for statistical analysis. The primary data collection instrument was a self-structured questionnaire The data collected were subjected to statistical analysis, commencing with the computation of means and standard deviations to assess the central tendencies and variations within the dataset. Subsequently, a Structural Equation Model (SEM) analysis was employed to delve deeper into the data, allowing for an exploration of the significance of the relationships among the variables and the potential moderating effects of certain variables.

Result

Table 1. — *Respondents responses to the question items*

Dimensions	The scale of the expressions	Mean (μ)	Std (σ)	Remark
Strive	1. When I failed topic lessons, I tried persistently.	3.01	0.91	Agree
	2. In everything I do, I strive for excellence.	2.73	1.04	Agree
	3. I don't enjoy completing simple things that everyone can complete.	3.07	0.87	Agree
	4. I want all of my classes to pass.	3.46	0.53	Agree
	5. I appreciate responding to challenging exam questions.	3.18	0.84	Agree
	6. If I have test, I try to give it my all.	3.24	0.66	Agree
	7. Receiving poor grades in class makes me sad.	3.80	0.40	Agree
	8. I want to receive the best grade possible in each topic lesson.	3.96	0.19	Agree
	9. It makes me unhappy if I don't receive high grades.	3.58	0.50	Agree
	10. I work really hard on my subject studies.	3.41	0.62	Agree
	11. I exclusively study for tests during subject classes.	3.33	0.75	Agree
	12. I appreciate learning new things.	3.45	0.51	Agree
Participation	13. As soon as I start studying classes, I get bored.	2.33	0.89	Disagree
	14. I prefer that simple concept be presented in subject classes rather than complex ones.	3.36	0.48	Agree
	15. I enjoy doing well in school.	3.42	0.59	Agree
	16. When I can't do my homework for a subject, I get upset.	2.95	1.02	Agree
Willingness	17. I don't strive to learn anything beyond what is taught.	2.54	1.12	Agree
	18. After the class in my subject, I begin studying.	3.36	0.55	Agree
	19. When I do well in school, I feel better.	3.30	0.69	Agree
	20. Even when there are no exams scheduled, I reread the material.	2.22	0.59	Disagree
Maintaining	21. Even if my teachers tell me not to, I study more than my assigned task.	2.71	1.04	Agree
	22. I make an effort to comprehend the lesson.	3.24	0.47	Agree
	23. I make an effort to get along with my subject teacher.	3.41	0.59	Agree
Aggregate mean		**3.18**	**0.43**	**Agree**

Concerning striving with regard to Attitudes Towards Persistence and Excellence

Respondents demonstrated a notable trend towards persistence, with an average rating of $\mu = 3.01$ ($\sigma = 0.91$), indicating that, on average, individuals tend to agree ($\mu > 2.5$) that they exert persistent efforts when encountering difficulties in topic lessons. The low standard deviation (σ) underscores the consistency of this pattern, indicating relatively little variation among responses. In various aspects of their lives, respondents expressed a strong commitment to achieving excellence, as reflected in a mean score of $\mu = 2.73$ ($\sigma = 1.04$). This demonstrates a general inclination among respondents to aspire towards excellence in their endeavours. However, it's worth noting that the higher standard deviation (σ) indicates a greater diversity of responses, implying a more varied range of attitudes towards this aspiration. Additionally, respondents showed a preference against simple tasks that everyone can complete, with an average rating of $\mu = 3.07$ ($\sigma = 0.87$), suggesting a shared tendency to avoid such tasks, albeit with moderate variability in individual responses.

Academic Goals and Study Efforts

Regarding academic pursuits, respondents revealed a strong desire for success across all their classes, with an average score of $\mu = 3.46$ ($\sigma = 0.53$), indicating a consensus among respondents ($\mu > 2.5$) that they are motivated to see all their classes succeed, with relatively low variability in responses. Furthermore, participants generally appreciate tackling challenging exam questions ($\mu = 3.18$, $\sigma = 0.84$), although there is moderate variability in this appreciation. When faced with tests, respondents consistently put forth their best effort, as reflected in a mean score of $\mu = 3.24$ ($\sigma = 0.66$), indicating a shared commitment to striving for excellence during exams. Finally, while the desire for high grades in topic lessons is strong ($\mu = 3.96$, $\sigma = 0.19$), respondents' emotional well-being is moderately affected when they don't achieve high grades ($\mu = 3.58$, $\sigma = 0.50$). Additionally, they generally dedicate substantial effort to their subject studies, as indicated by an average rating of $\mu = 3.41$ ($\sigma = 0.62$), demon-strating their commitment to academic endeavors.

Attitudes Toward Learning and Studying

Respondents generally display a positive attitude toward learning new things, with an average rating of $\mu = 3.45$ ($\sigma = 0.51$), signifying agreement with the statement. This suggests a strong inclination ($\mu > 2.5$) to appreciate acquiring new knowledge and experiences, reflecting a proactive approach to learning. Additionally, there is a disagreement ($\mu < 2.5$) with the statement that they get bored as soon as they start studying classes, with a mean rating of $\mu = 2.33$ ($\sigma = 0.89$), indicating that, on average, respondents do not experience immediate boredom when beginning their study sessions, suggesting an initial engagement with the study material.

Preferences and Emotional Reactions

Respondents express a preference for simple concepts in subject classes over complex ones, as indicated by a mean rating of $\mu = 3.36$ ($\sigma = 0.48$), implying a desire for clear and straightforward explanations in their academic coursework. Moreover, there is a positive attitude toward doing well in school, with a mean rating of $\mu = 3.42$ ($\sigma = 0.59$), suggesting that academic success is associated with enjoyment among respondents. In line with this, when they can't complete their homework for a subject, respondents tend to get upset, with a mean rating of $\mu = 2.95$ ($\sigma = 1.02$), reflecting the emotional impact of academic challenges.

Study Habits and Interactions

Respondents generally agree ($\mu > 2.5$) that they make an effort to comprehend the lesson (Mean: $\mu = 3.24$, $\sigma = 0.47$), emphasizing their commitment to understanding the material. Similarly, they make an effort to get along with their subject teacher, with a mean rating of $\mu = 3.41$ ($\sigma = 0.59$), indicating a proactive approach to building positive relationships with their instructors. On the other hand, while respondents tend to engage in additional studying beyond their assigned tasks, as evidenced by a mean rating of $\mu = 2.71$ ($\sigma = 1.04$), they are less inclined to reread material when no exams are scheduled, with a mean rating of $\mu = 2.22$ ($\sigma = 0.59$),

suggesting a selective approach to reviewing course content.

In this structural equation model (SEM) analysis that explores the relationships between Achievement Motivation (AM), Academic Achievement (AA), Gender (GR), and Socioeconomic Status (SES), with a particular focus on the mediating roles of GR and SES. interpreting these findings empirically: ***Direct Effect of Achievement Motivation (AM) on Academic Achievement (AA):*** The coefficient for the path from AM to AA is highly significant ($p < 0.001$) with a positive value of 13.03852. This result implies that higher levels of Achievement Motivation (AM) are associated with significantly higher levels of Academic Achievement (AA). In empirical terms, individuals who exhibit greater motivation tend to perform better academically. ***Gender (GR) as a Mediator:*** The path coefficient for the relationship between Gender (GR) and Academic Achievement (AA) is positive but not statistically significant ($p > 0.05$). This suggests that gender does not have a direct impact on academic achievement in this model. In other words, being male or female does not, by itself, predict academic performance. ***SES (Socioeconomic Status) as a Mediator:*** Similar to gender, the path coefficient for the relationship between Socioeconomic Status (SES) and Academic Achievement (AA) is positive but not statistically significant ($p > 0.05$). This indicates that SES does not directly influence academic achievement in this context. In practical terms, the socioeconomic status of individuals, within the range represented in this dataset, does not directly affect their academic success.
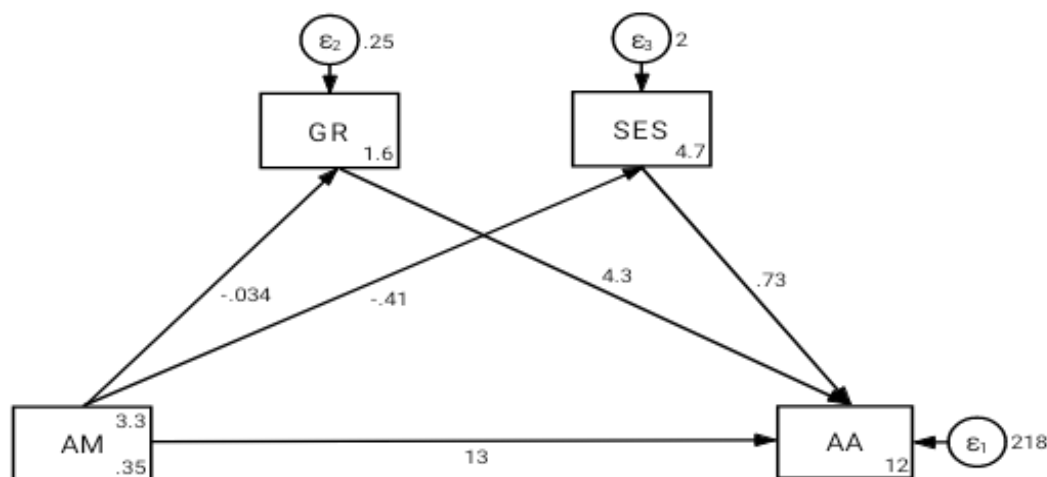

Figure 1. *Summary of Analyses of Hypotheses 1, 2 and 3)*

Discussion

Hypotheses one: The study employed a structural equation model (SEM) to investigate the intricate relationships among Achievement Motivation (AM), Academic Achievement (AA), Gender (GR), and Socioeconomic Status (SES). The study discovered that the path coefficient from AM to AA is highly significant ($p < 0.001$) and exhibits a positive value of 13.03852. This result underscores the pivotal role of motivation in academic achievement, aligning with contemporary research emphasizing motivation as a critical determinant of educational success (Cleary & Zimmerman, 2004). This onfirms that individuals with higher levels of motiva-

tion tend to perform significantly better academically, emphasizing the importance of nurturing motivation among students.

Hypotheses two: The analysis reveals that the path coefficient between GR and AA is positive but not statistically significant ($p > 0.05$). This suggests that gender, in isolation, does not exert a direct influence on academic achievement in this specific context. This finding is in line with recent research indicating that gender alone is insufficient to predict academic performance and emphasizes the need to consider additional contextual factors (Else-Quest et al., 2010).

Hypothesis three: The path coefficient between SES and AA is positive but not sta-

tistically significant (p > 0.05). This implies that, within the range represented in the dataset, SES does not have a direct impact on academic achievement (Sirin, 2005).

Conclusion

In conclusion, this SEM analysis provides a nuanced understanding of the relationships among Achievement Motivation (AM), Gender (GR), Socioeconomic Status (SES), and Academic Achievement (AA). While GR and SES do not have direct effects on AA in this specific context, they act as mediating variables, indirectly influenced by AM. The study underscores the central role of motivation in academic success and highlights the need for a comprehensive consideration of contextual factors in academic research

Recommendations

1. Educational institutions and policymakers should consider programmes and initiatives that encourage and enhance achievement motivation among students.

2. While gender and socioeconomic status may not have direct effects on academic achievement in this context, it's essential to consider these factors when designing educational policies and interventions. Tailored support may be needed for students from diverse backgrounds.

3. Educational institutions should adopt holistic approaches to address academic success, recognizing that motivation is just one component. Factors such as teaching quality, parental involvement, and social support also play critical roles in shaping student outcomes.

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