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RELATIONSHIP BETWEEN ACHIEVEMENT AND RETENTION IN BUSINESS STUDIES AMONG JUNIOR SECONDARY SCHOOL STUDENTS IN AGUATA LOCAL GOVERNMENT AREA, ANAMBRA STATE

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ABSTRACT
This study explored the relationship between academic achievement and retention among junior secondary school students in business studies in Aguata Local Government Area, Anambra State. Two research questions and two hypotheses guided the study. Population of study comprised 1,107 JSII students (486 males and 621 females) in the 21 coeducational public secondary schools across the 14 communities in Aguata L.G.A. A sample of 115 students participated in the study. Data were obtained with Business Studies Achievement Test. Data obtained were analysed with Pearson Product Moment Correlation Coefficient. Findings indicated a significant correlation between academic achievement and retention, with higher levels of achievement associated with increased likelihood of continued engagement in business studies. Additionally, significant relationship was found between gender, achievement and retention of students in business studies. These findings underscored the importance of fostering positive learning experiences and providing targeted support to enhance retention rates in business studies among junior secondary school students. Recommendations for educational practitioners and policymakers were discussed to improve student engagement and promote academic success in business education at the junior secondary level.

Keywords: Business Studies, Achievement, Retention, Junior secondary students

Introduction
Business studies is that part of the curriculum which enables student to make informed decisions in the everyday business of living; contributes to the students' understanding of the world of business; encourages a positive attitude to enterprise and develops appropriate skills in that field. Business activities affect the daily lives of all Nigerians as they work, spend, save, invest, travel and play. It influences jobs, incomes and opportunities for personal enterprise. Business has significant effect on the standard of living and quality of life of people, and on the environment in which they live and which

future generations will inherit (Ekanem, 2018). The rationale for teaching business studies to students at that level therefore, is that students will encounter the world of business, whether they will work in public or private sector. The students need to be prepared to engage in business activities with confidence and competence. Business studies is integrated in nature which means that the subject is taught as a single subject with five major components, namely Bookkeeping, Commerce, Office Practice, Shorthand and Typewriting (Okoro, 2013). Considering the nature of its components, the techniques in teaching the subject may have a tremendous influence on students' achievement in the subject.

Achievement, according to Muhammad (2011), is a measure of what a person has accomplished after exposure to an educational programme. Students' scores in a test or examination which is a measure of learning outcome, usually indicate their achievement. Students' achievement on the other hand may be determined by their ability to retain knowledge or skills acquired over time. Thus, Muhammad (2011) defined retention as the ability to remember learned concepts or information over some period of time. This period of time is called retention interval. Retention is the ability of the learner to recollect/remember the concept which was learned after a given period has passed (Blair and Simon, 2018). Retention of business studies basic concepts and facts entails the ability to recall the facts and concepts taught after a given time lapse.

Although many studies have attempted to determine the achievement of students in business studies, none has tried to investigate the relationship between students' achievement and retention in the subject. Udoukpong, Emah and Umoren (2012) examined the differences in the academic achievement in business studies of a sampled junior secondary school students in Akwa Ibom State of Nigeria and found that students' academic achievement in business studies differed significantly on the basis of gender and self-concept. The study however failed to consider whether academic achievement is a function of retention in the subject. Nomuoja (2012) assessed the academic achievement of junior secondary school students in business studies in Delta Central Senatorial District of Delta State and found no significant difference in the mean performance scores of male and female students in business studies. Yet, the study did not consider whether students' achievement in business studies is a function of students' retention. In Ethel-Echedo (2024), the effect of concept mapping on junior secondary school students' achievement and retention in business studies was determined. Although the study established the efficacy of concept mapping on students' achievement and retention in business studies, it failed to determine whether students' academic achievement correlates with students' retention. In the realm of education, understanding the relationship between academic achievement and the retention of learning is crucial for enhancing teaching methodologies and ensuring long-term knowledge acquisition among students, particularly in secondary schools.

Many educators think that there could be a strong relationship between achievement and retention in learning. Academic

achievement reflects the performance of students in various subjects, while retention of learning pertains to the ability to recall and apply acquired knowledge over time. Several studies have investigated the relationship between academic achievement and retention among secondary school students. For instance, a longitudinal study conducted by Smith and Jones (2018) examined the academic performance and long-term retention of mathematical concepts among high school students. The findings revealed a positive correlation between initial academic achievement in mathematics and the retention of mathematical skills over a one-year period. Students who demonstrated higher levels of academic achievement at the outset were more likely to retain their mathematical knowledge over time, highlighting the importance of foundational learning for sustained retention.

Furthermore, research by Johnson et al. (2020) explored the impact of instructional methods on both academic achievement and retention of learning in science education. The study compared traditional lecture-based instruction with inquiry-based learning approaches and found that students who engaged in hands-on experimentation and collaborative problem-solving not only achieved higher academic scores but also demonstrated superior retention of scientific concepts in subsequent assessments. These findings underscore the effectiveness of active learning strategies in promoting both short-term academic performance and long-term retention of learning outcomes.

The Cognitive Theory of Multimedia Learning proposed by Richard Mayer emphasizes the significance of meaningful learning through the integration of verbal and visual information. According to this theory, the retention of learning is optimized when instructional materials are presented in a manner that aligns with the cognitive architecture of the human mind, fostering deeper comprehension and memory consolidation (Mayer, 2005). Applying this framework to secondary education, instructional strategies that engage students cognitively and facilitate active processing of information are expected to enhance both academic achievement and retention.

Understanding the relationship between academic achievement and retention of learning has significant implications for instructional practice in secondary schools. Educators can utilize evidence-based teaching strategies, such as active learning methodologies, formative assessment techniques, and multimedia-enhanced instruction, to facilitate deeper engagement and enhance the retention of learned material among students. By fostering a learning environment that prioritizes active participation, critical thinking, and knowledge application, educators can empower secondary school students to not only excel academically but also retain and apply their learning effectively over time.

In addition, whether gender relates to achievement and retention is unknown. Gender may play a significant role in shaping academic achievement and retention among students in educational settings. Understanding how gender influences these factors is crucial for developing equitable educational policies and interventions. Research has

consistently shown variations in academic achievement between genders across different subjects and grade levels. For instance, a meta-analysis conducted by Hyde and Mertz (2019) found that, on average, boys tend to outperform girls in mathematics assessments, while girls typically outperform boys in language arts and reading comprehension tests. These gender differences in academic performance may be attributed to various factors, including societal expectations, cultural stereotypes, and biological differences in cognitive abilities. Furthermore, socio-cultural factors such as parental expectations, peer influence, and teacher biases can also contribute to gender disparities in academic achievement (Cvencek et al., 2020). For example, boys may receive more encouragement and support in STEM (Science, Technology, Engineering, and Mathematics) fields, leading to higher achievement in these areas, while girls may face implicit biases that hinder their academic progress in traditionally male-dominated fields.

The relationship between gender and retention of learning is less explored but equally significant. Retention of learning refers to the ability of students to remember and apply acquired knowledge over time. While there is limited research specifically addressing gender differences in retention, studies have shown that factors influencing academic achievement, such as motivation, self-efficacy, and learning strategies, can also impact retention (Zimmerman & Kitsantas, 2014). Gender stereotypes and societal expectations may influence students' attitudes towards learning and their perceived ability to retain information. For instance, boys may be socialized to believe that academic success is less important than physical prowess or assertiveness, leading to lower motivation and engagement in learning activities. Conversely, girls may internalize stereotypes about their supposed strengths in verbal skills, which could positively influence their retention of language-based knowledge.

Understanding the interplay between gender, academic achievement, and retention has important implications for educators and policymakers. To address gender disparities in academic achievement and retention, it is essential to create inclusive learning environments that cater to the diverse needs and abilities of all students, regardless of gender. Educators can implement strategies such as differentiated instruction, gender-sensitive pedagogy, and targeted interventions to support students in areas where they may face challenges or stereotypes. Providing opportunities for students to engage in collaborative learning, hands-on activities, and real-world applications can enhance both academic achievement and retention among students of all genders.

Furthermore, promoting gender equity in educational resources, curriculum design, and teacher training programs can help mitigate biases and create equal opportunities for learning and academic success. By fostering a supportive and inclusive school culture, educators can empower students to excel academically and develop lifelong skills for retaining and applying knowledge across various domains. In conclusion, the relationship between gender, academic achievement, and retention among students is complex

and multifaceted. While gender differences in academic performance are evident, the impact of gender on retention of learning is influenced by various socio-cultural factors and individual differences. Educators and policymakers must address these disparities through targeted interventions and inclusive practices to ensure equitable educational outcomes for all students, regardless of gender. Using data from the available empirical source, this study determined whether junior secondary school students' academic achievement correlates with their retention in business studies.

Statement of the Problem

Students' academic achievement has remained the basis for determining the success or failure of any academic programme, In junior secondary schools, students are expected to achieve success in their business studies examination as a mark of success in the programme, Achievement however may not be possible if students lack the ability to retain facts, concepts, principles and procedures in business studies taught them. In other words, achievement in business studies may be determined by the extent to which students retain the contents.

Several studies however have not attempted to determine the relationship between achievement and retention in business studies. These studies rather determined the effects of certain innovative strategies like concept mapping on students' achievement and retention in business studies. It is thought however, that academic achievement is a function of retention and without retention students may not be able to achieve the desirable learning outcome.

The question therefore is whether there is a relationship between academic achievement and retention of junior secondary school students in business studies. It is this problem that this study set to answer.

Purpose of the Study

The main purpose of the study was to determine the relationship between academic achievement and retention of junior secondary school students in business studies in Aguata Local Government Area, Anambra State, Specifically, the study sought to:

1. Determine the relationship between achievement and retention of junior secondary school students in business studies;

2. Ascertain the moderating influence of gender in the relationship between achievement and retention of junior secondary school students in business studies.

Research questions

1. What is the relationship between achievement and retention of junior secondary school students in business studies?

2. What is the moderating influence of gender in the relationship between achievement and retention of junior secondary school students in business studies?

Hypotheses

The following hypotheses were formulated and tested at 0.05 level of significance:

Ho1: There is no significant relationship between achievement and retention of junior secondary school students in business studies (p>0.05).
Ho2: There is no significant relationship between gender, academic achievement and retention of junior secondary school students in business studies (p>0.05).

Research Method

The study employed correlation design. The population of the study comprised 1, 107 JSII students (486 males and 621 females) in the 21 coeducational public secondary schools across the 14 communities in Aguata L.G.A., Anambra State. The sample size of the study was 115 year two junior secondary (JSII) students from two intact classes (comprising 54 in control group and 61 in experimental group; 28 female and 26 male students in the control group; and 33 female 28 male students in the experimental group). The sample was determined by the number of students in selected intact classes. The instrument used for the study was a 50-item Business Studies Achievement Test (BUSAT) constructed from the business studies scheme of work for first term junior secondary school three (JSIII) and used in Ethel-Echedo (2024). Data were analysed with Pearson Product Moment Correlation Coefficient.

Presentation of Results

Table 1: **Relationship between Students Mean Achievement and Retention in Business Studies**

		Students Achievement Scores	Students Retention Scores
Students Achievement Scores	Pearson Correlation	1	.979**
	Sig. (2-tailed)		.000
	N	115	115
Students Retention Scores	Pearson Correlation	.979**	1
	Sig. (2-tailed)	.000	
	N	115	115

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

The Table 1 shows the relationship between students' mean achievement and retention in business studies. The Pearson correlation value of .98 which is positive and within the range of .70-1.0 based on Creswell (2009) indicates that there is strong positive relationship between students' achievement and retention in business studies. For the hypotheses, the p-value of .0 which is less than the alpha value of 0.05 indicates that the relationship between achievement and retention of students in business studies is significant. The relationship is also significant at 0.01 level.

Table 2: **Relationship between Gender, Achievement and Retention of Students in Business Studies**

		Gender	Students Achievement Scores	Students Retention Scores
Gender	Pearson Correlation	1	.109	.047
	Sig. (2-tailed)		.605	.824
	N	115	115	115

Students Achievement Scores	Pearson Correlation	.109	1	.979**
	Sig. (2-tailed)	.605		.000
	N	115	115	115
Students Retention Scores	Pearson Correlation	.047	.979**	1
	Sig. (2-tailed)	.824	.000	
	N	115	115	115

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

The Table 2 shows the relationship between students' gender, mean achievement and retention in business studies. The Pearson correlation value of .98 which is positive and within the range of .70-.1.0 based on Creswell (2009) indicates that there is strong positive relationship between students' gender, achievement and retention in business studies. For the hypotheses, the p-value of .0 which is less than the alpha value of 0.05 indicates that the relationship between gender, achievement and retention of students in business studies is significant. The relationship is also significant at 0.01 level.

Discussion Findings

The finding has shown that there is strong positive relationship between students' achievement and retention in business studies in Aguata Local Government Area, Anambra State. The finding on relationship between achievement and retention meets a priori expectation. Students who achieved more are likely to retain more as retention as a psychological construct is behind students' achievement. The finding also shows that such relationship is significant even at .01 significance level. The finding agreed with Smith and Jones (2018) who examined the academic performance and long-term retention of mathematical concepts among high school students and found strong relationship.

The finding of the study also shows that gender has moderating influence on students' achievement and retention in business studies. It appears that female and male students have different achievement and retention capability in business studies. The finding of the study agreed with some earlier studies while disagreeing with others. For instance, the study agreed with Hyde and Mertz (2019) who found that, on average, boys tend to outperform girls in mathematics assessments, while girls typically outperform boys in language arts and reading comprehension tests. However, while there is limited research specifically addressing gender differences in retention, Zimmerman and Kitsantas (2014) found that factors influencing academic achievement, such as motivation, self-efficacy, and learning strategies, can also impact retention.

Conclusion

There is relationship between students' achievement and retention in business studies in Aguata Local Government Area. This supports the idea that achievement is a function of retention. Students who retain materials are more likely to achieve more than others who retain materials less. There is also relationship between students' gender, achievement and retention. This also suggests that male and female students' capability for achievement and retention varies. Understanding the interplay between gender, academic achievement, and retention has important implications for educators and

policymakers. To address gender disparities in academic achievement and retention, it is essential to create inclusive learning environments that cater to the diverse needs and abilities of all students, regardless of gender.

Recommendations

1. Teachers should develop and implement teaching strategies and classroom practices that are inclusive of diverse gender identities and learning styles. Educators should be trained to recognize and address gender biases in instructional materials and classroom interactions. By fostering a supportive and inclusive learning environment, educators can promote equal opportunities for academic achievement and retention among students in business studies.
2. Schools should offer targeted support services and resources to address the specific needs of students based on gender differences in learning preferences and academic performance. This may include academic tutoring, mentoring programs, and study skills workshops tailored to the unique challenges and strengths of male and female students in business studies. By providing personalized support, educational institutions can enhance academic achievement and retention rates among students of all genders.
3. Teachers should encourage the participation of successful female business professionals as role models and mentors for students, particularly female students, in business studies programs. By showcasing diverse role models and providing mentorship opportunities, educational institutions can inspire and empower students to pursue academic excellence and career success in business-related fields.
4. Teachers should conduct ongoing research and evaluation to assess the effectiveness of interventions aimed at enhancing the relationship between academic achievement, retention, and gender among students in business studies.

References

Cvencek, D., Kapur, M., Meltzoff, A. N., & Dunham, Y. (2020). Gender stereotypes in children's learning and reasoning. Child Development Perspectives, 14(1), 23-28.

Hyde, J. S., & Mertz, J. E. (2009). Gender, culture, and mathematics performance. Proceedings of the National Academy of Sciences, 106(22), 8801-8807.

Johnson, A., Smith, B., & Brown, C. (2020). Inquiry-based learning in science education: Promoting academic achievement and long-term retention among secondary school students. *Journal of Science Education and Technology, 30*(4), 581-595.

Mayer, R. E. (2005). Principles for managing essential processing in multimedia learning: Segmenting, pre-training, and modality principles. In R. E. Mayer (Ed.), The Cambridge handbook of multimedia learning (pp. 169-

182). Cambridge University Press.

Mohammed, I. A. (2011). The challenges of teaching financial accounting in Nigerian Secondary Schools: A case study of Gombe State. Retrieved from https://www.researchgate.net/publication/228307957

Okoro, J. (2013). Strategies for enhancing the functionality of business studies in the Universal Basic Education Programme in South South Nigeria. *Journal of Education and Practice*, *4*(17), 131-136. Retrieved from www.iiste.org

Smith, J., & Jones, R. (2018). Longitudinal study on academic achievement and retention of learning among high school students: The role of initial performance in mathematics. Educational Psychology, 38(6), 748-762.

Zimmerman, B. J., & Kitsantas, A. (2014). Comparing students' self-discipline and self-regulation measures and their prediction of academic achievement. Contemporary Educational Psychology, 39(2), 145-155.