**RESEARCH PROPOSAL**

**Title:** The Effect of Age and Gender on Academic Performance among Junior High School Students: A Case Study of Marakaz Islamic school in the West Mamprusi District

**1. Abstract**

This study seeks to investigate the impact of age and gender on the academic performance of Junior High School students at Marakaz Islamic school in the West Mamprusi District. Education is a vital component of national development, and understanding the socio-demographic factors influencing student achievement is essential for effective educational planning. Using a cross-sectional design, the study will analyze performance data across core subjects including Mathematics, Science, English Language, and Social Studies. Data will be collected from 150 students using structured questionnaires and academic records. Multiple regression analysis will be employed to examine the relationships among variables. The findings are expected to inform evidence-based educational interventions and contribute to local policy discussions.

**2. Introduction**

Education plays a pivotal role in shaping individuals and societies. In Ghana, Junior High School (JHS) represents a crucial stage where students are prepared for senior secondary education and beyond. However, disparities in student performance continue to raise questions about the role of demographic variables such as age and gender. This study seeks to explore how these factors influence academic outcomes among JHS students at Marakaz Islamic.

**3. Problem Statement**

Despite policy efforts to improve basic education outcomes in Ghana, significant variation persists in student performance. Factors such as age and gender may contribute to these differences, yet limited empirical evidence exists, particularly in the West Mamprusi District. Understanding whether and how these variables influence academic success is crucial for addressing learning gaps and promoting inclusive education.

**4. Objectives**

* To examine the effect of age on academic performance among JHS students.
* To evaluate gender-based differences in academic achievement.
* To explore the interaction between age, gender, and academic performance.

**5. Research Questions**

1. Does age significantly influence academic performance among JHS students?
2. Does gender significantly affect academic performance among JHS students?
3. How do age and gender interact in influencing academic outcomes?

**6. Hypotheses**

* H0₁: Age has no significant effect on academic performance.
* H0₂: Gender has no significant effect on academic performance.

**7. Significance of the Study**

The study will provide insights into the demographic factors influencing academic performance at the JHS level. The findings can inform school-level interventions, teacher training programs, and district-level policy decisions aimed at promoting equity and academic excellence.

**8. Literature Review**

Numerous studies have examined the influence of age and gender on academic outcomes. Age-related performance differences are often attributed to cognitive maturity, while gender disparities have been linked to socialization patterns and learning preferences. However, findings remain inconsistent across contexts. In Ghana, few localized studies have been conducted, especially within rural districts such as West Mamprusi. This study fills that gap by offering context-specific evidence.

**9. Methodology**

* **Research Design:** Quantitative, cross-sectional survey design.
* **Population:** JHS students at Marakaz Islamic School.
* **Sample Size:** 150 students selected using stratified random sampling.
* **Data Collection:** Structured questionnaire and academic performance records.
* **Variables:**
  + Dependent: Academic performance (average score across core subjects).
  + Independent: Age and gender.
* **Data Analysis:** Descriptive statistics and multiple regression analysis using R.

**10. Ethical Considerations**

Informed consent will be obtained from participants and guardians. Participation will be voluntary and anonymous. Data will be handled confidentially, and findings will be used solely for academic purposes.

**11. Expected Results**

It is anticipated that age and gender will show varying levels of influence on academic performance, with older students potentially performing better due to maturity. Gender-based subject differences may emerge, although overall impact may not be statistically significant.

**12. References**

(References will be formatted in APA style in the final version. Sample entries below.)

* Akyeampong, K. (2010). 50 Years of Educational Progress and Challenge in Ghana. *Research Monograph*, University of Sussex.
* Colley, A., & Comber, C. (2003). Age and gender effects in computer attitudes among secondary school students in the UK. *Educational Research*, 45(2), 155–165.
* UNESCO. (2018). *Global Education Monitoring Report.* Paris: UNESCO.