

## Exploring the Correlation between Students' Performance in Educational Statistics and Research Methods in Education: The Influence of Undergraduate Programs

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**Abstract :** This study aimed to explore the correlation between students' performance in educational statistics and research methods in education, as well as investigate potential differences in performance based on their undergraduate programs. A cross-sectional design was employed, and data was collected from 170 students enrolled in master of philosophy programs in the department of education and psychology. The correlation analysis revealed a strong positive correlation between students' performance in intermediate statistics in education and research methods in education. This indicates a close relationship between the two domains. The MANOVA analysis showed no significant differences in the linear combination of intermediate statistics in education and research methods in education scores across the different undergraduate programs. The tests of between-subjects effects further confirmed that the student's performance in intermediate statistics in education and research methods in education did not differ significantly across the different undergraduate programs. These findings contribute to the existing literature by providing insights into the correlation between educational statistics and research methods, and the influence of undergraduate program backgrounds on students' performance in these domains. The strong positive correlation between intermediate statistics and research methods highlights the importance of a solid foundation in statistics for understanding and applying research methods. Moreover, the consistent relationship across different academic backgrounds emphasizes the need for targeted interventions and support systems to enhance graduate students' competencies in these critical areas.

**Keywords :** educational statistics, research methods, undergraduate programs, students performance

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