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*The Impact of Excel-Based Instruction on Business Students' Understanding of the Normal Distribution in Statistics*

Statistics is an indispensable field of study that plays a pivotal role in various academic disciplines and real-world applications. The ability to analyze, interpret, and draw meaningful conclusions from data is a fundamental skill for students pursuing degrees in science, social sciences, business, and many other fields. However, the intricate nature of statistical analysis often poses a formidable challenge for students, both novice and experienced, who grapple with complex mathematical concepts and intricate statistical methodologies. One key tool that has been increasingly integrated into statistics education is Microsoft Excel. Excel, a widely used spreadsheet software, offers a user-friendly platform for data entry, organization, and basic statistical analysis. Its ubiquity in both educational and professional settings has made it an attractive candidate for assisting students in their journey to comprehend and apply statistical concepts. The combination of Excel's user-friendliness and its powerful data analysis features provides an environment that bridges the gap between theoretical statistical concepts and practical implementation. This study investigates the impact of using Excel on students' understanding of statistics, with a focus on the fundamental concept of the normal distribution. We explore how integrating Excel into statistics education influences students' ability to comprehend and apply the normal distribution in practical contexts. By evaluating the benefits, limitations, and pedagogical strategies associated with Excel as an instructional tool, this research highlights its role in enhancing statistical learning and its potential implications for students' academic performance and future professional success.