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Exploring the Cybersecurity-Resilience Gap: AnAnalysis of Student Attitudes and Behaviors in Higher Education

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Abstract: Cyberattacks frequently target higher educational institutions, making cybersecurity awareness and resilience critical for students. However, limited research exists on cybersecurity awareness, attitudes, and resilience among students in higher education. This study addresses this gap using the Theory of Planned Behavior as a theoretical framework. A modified Human Aspects of Information Security Questionnaire was employed to gather 266 valid responses from undergraduate and postgraduate students at a South African higher education institution. Key dimensions of cybersecurity awareness and behavior, including password management, email usage, social media practices, and mobile device security, were assessed. A significant disparity in cybersecurity awareness and practices, with postgraduate students demonstrating superior performance across several dimensions was noted. This research postulates the existence of a Cybersecurity-Education Inflection Point during the transition to postgraduate studies, coined as the Cybersecurity-Resilience Gap. These concepts provide a foundation for developing targeted cybersecurity education initiatives in higher education, particularly highlighting the need for earlier intervention at the undergraduate level.

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