

Factors Associated with the Usage of Mobile Security Techniques among State University Students in Sri Lanka

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Abstract

With the expanding role of mobile technology in university life, loss of students' academic data due to weak security measures, Learning Management System Violations, identity theft, and cybercrime can be seen. Given the limited use of advanced mobile security measures especially among Sri Lankan undergraduates, this study examines usage determinants of mobile security techniques use and suggests institution-level interventions to strengthen practices. Using a quantitative, cross-sectional design, survey data from selected 384 undergraduates via cluster sampling were analyzed by using SPSS with descriptive statistics, Pearson correlations, and multiple regression. All the four predictors showed positive, statistically significant associations with usage: attitude ($B = 0.393$, $\beta = 0.351$, $p < .001$), knowledge ($B = 0.186$, $\beta = 0.163$, $p = .031$), perceived behavioral control ($B = 0.168$, $\beta = 0.156$, $p = .035$), and subjective norms ($B = 0.136$, $\beta = 0.129$, $p = .016$). Although awareness of risks was moderate to high, there was a practical awareness gap in implementing measures such as multi factor authentication, application permission control, and data encryption. This finding adds context specific evidence on the determinants of mobile security techniques among undergraduates in the Sri Lankan state university system and extend usage adoption perspectives (e.g., TPB aligned constructs) to this domain. The study recommends concrete institutional initiatives mandatory cybersecurity workshops, curriculum integration of mobile security, targeted awareness campaigns, and policy guidance to reduce vulnerability and improve sustained adoption of protective techniques in higher education settings.

Keywords: attitude, mobile security techniques, perceived behavioral control, subjective norms, technology adoption