

Effects of Digital Addiction and Phubbing on the Social Well-being of Agriculture Undergraduates: A Case Study of Rajarata University of Sri Lanka

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The next step in agriculture is precision agriculture, which relies on digital technologies and big data. For effective outcomes, users and operators mustn't be affected by digital addiction. In Sri Lanka, after the COVID pandemic, students have become more reliant on digital platforms, increasing their exposure to digital devices and the risk of digital addiction and phubbing behavior. In the Sri Lankan context, especially among agriculture undergraduates, no prior study has explored how these behaviors affect the effective use of smart technologies, AI, and big data in the agricultural sector. Moreover, their potential link to reduced social well-being remains unexamined. This study aims to address this gap by investigating the interrelationships among digital addiction, phubbing, and social well-being. Therefore, this study was conducted as a case study at Rajarata University of Sri Lanka to assess the current situation among undergraduate students in agriculture. A cross-sectional survey was conducted in 2024 with 266 undergraduates (75% females and 25% males) aged around 24 years. Data were randomly collected on demographics, digital device usage, social networking (SN), social support (SS), self-control (SC), fear of missing out (FOMO), digital addiction (DA), phubbing behavior (PB), and social well-being (SWB). Structural equation modelling was performed using AMOS and SPSS 26. On average, undergraduates used two digital devices and 21 software applications for 12 hours daily. FOMO ($p < 0.001$), SC ($p = 0.003$), and English literacy (EL) ($p = 0.013$) were major factors linked to DA. DA ($p < 0.001$) and SC ($p = 0.003$) were connected to PB. SWB was significantly influenced by DA ($p = 0.001$), FOMO ($p < 0.001$), SS ($p = 0.002$), and EL ($p = 0.021$). The model explained 44% of DA, 84% of PB, and 34% of SWB. DA directly affects SWB, while PB has no significant impact. To address exhibit concerns, educational institutions can implement awareness programs, train academic staff on digital well-being practices, and promote the use of app usage limiters and data limiters to manage usage and time consumption, and enhance student support systems, including English language and communication skills. Introducing "digital detox" initiatives can also foster healthier digital habits. Further research with larger, more diverse samples is needed to develop broadly applicable strategies for balanced digital use in higher education.

Keywords: Internet addiction, Smartphone addiction, Social media addiction, Youth education, Youth social well-being.