## A survey on smartphone dependence and psychological effects among undergraduate students in a Malaysian University

## **ABSTRACT**

Objective: Problematic smartphone use (PSU) is the development of pathological dependence at the expense of performing activities of daily living, thus having negative health and psychological impact on the users. Previous PSU studies focused on medical students and little is known regarding its effect on students undergoing other courses. The objective of this study is to identify the pattern of smartphone usage and determine the psychological factors affecting PSU among undergraduate students in Malaysia and compare the pattern among students from different fields of study. Method: A prospective cross-sectional study was conducted using the validated Smartphone Addiction Scale-Malay version (SAS-M) questionnaire. One-way ANOVA was used to determine the correlation between the PSU among the students categorised by their ethnicity, hand dominance and by their field of study. MLR analysis was applied to predict PSU based on socio-demographic data, usage patterns, psychological factors and fields of study. Results: A total of 1060 students completed the questionnaire. Most students had some degree of problematic usage of the smartphone. Students used smartphones predominantly to access SNAs, namely Instagram. Longer duration on the smartphone per day, younger age at first using a smartphone and underlying depression carried higher risk of developing PSU, whereas the field of study (science vs. humanities based) did not contribute to an increased risk of developing PSU. Conclusion: Findings from this study can help better inform university administrators about at-risk groups of undergraduate students who may benefit from targeted intervention designed to reduce their addictive behaviour patterns.

**Keyword:** Smartphone addiction scale; Education; Social networking; Malaysia