

UNIVERSITI TEKNOLOGI MARA

**SMARTPHONE ADDICTION,
FAMILY CHARACTERISTICS AND
ITS OTHER ASSOCIATED FACTORS
AMONG ADOLESCENT
PSYCHIATRIC OUTPATIENTS IN
HOSPITAL MELAKA**

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ABSTRACT

Background: Smartphone usage is rapidly increasing over the years among adolescent. Excessive smartphone use could lead to addiction. Smartphone addiction has become a recent concern because of its potential to cause significant impairment of adolescent life as well as causing adverse effects on their physical and psychological health. There were many studies done on normal adolescent, but there were limited studies done on adolescent psychiatric patients.

Objectives: The aim of this study was to assess the prevalence of smartphone addiction, to identify the associating factors of smartphone addiction as well as to determine the predictors of smartphone addiction among adolescent psychiatric patients in Hospital Melaka.

Methodology: This was a cross-sectional study conducted among 64 adolescent psychiatric patients attending Child and Adolescent Psychiatric Clinic, Hospital Melaka and their parents. Universal sampling was used in this study. The data was collected via self-administered questionnaires. The questionnaires used were socio-demographic characteristics of patients and their parents, and duration of screen time proforma, Smartphone Addiction Scale – Short Version, as well as Asian Family Characteristic Scale. Descriptive analysis was performed, followed by bivariate analysis and multiple logistic regression analysis.

Results: Of the total 64 patients, 32 (50%) adolescent psychiatric patients has high risk of smartphone addiction. Bivariate statistical analysis revealed factors significantly associated with high risk smartphone addiction, namely using smartphone for social media, using smartphone for entertainment, adolescent duration of screen time more than 2 hours daily during weekdays, adolescent duration of screen time more than 2 hours daily during weekends and adolescent duration of screen time more than 2 hours daily over a week. Following multiple logistic regression involving the aforementioned variables, using smartphone for social media (Adj. OR = 3.29, $p = 0.025$), using smartphone for entertainment (Adj. OR = 3.66, $p = 0.046$), adolescent duration of screen time more than 2 hours daily during weekdays (Adj. OR = 3.03, $p = 0.042$), adolescent duration of screen time more than 2 hours daily during weekends (Adj. OR = 3.69, $p = 0.031$), and adolescent duration of screen time more than 2 hours daily over a week (Adj. OR = 6.17, $p = 0.005$) remained as independent predictive factors for high risk smartphone addiction among adolescent psychiatric patients.

Conclusion: In comparison to normal adolescent population, there was higher prevalent of high risk smartphone addiction among adolescent psychiatric patients. Socio-demographic factors of adolescents and parents as well as family characteristics factors did not predict smartphone addiction among the adolescent psychiatric patients, however, their smartphone usage status specifically, duration of screen time and type of usage (social media and entertainment) did. This entails for full awareness among parents, carers and healthcare professionals regarding this issue and for the development of programs to cater to this population in order to lessen the risk of smartphone addiction.

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CHAPTER ONE

INTRODUCTION

1.1 Introduction

It has been indisputable that for the past few decades, there has been rapid growth of digital devices and applications. For example, smartphones are popular devices that are used as the person's primary phone device which has capabilities to perform Internet-based services, and functions like a computer. Additionally, it includes having an operating system capable of downloading and running applications, as well as those created by third-party developers. A report, found that the number of smartphone users have been increasing worldwide from 2016 (2.5 billions) to currently in 2020 estimated about 3.5 billions and have been forecasted that there will be increment of several hundred millions of users over the years (O'Dea, 2020). In 2018, a research in United States of America found that 95% of adolescent have access to smartphones, either own or co-use (Pew Research Center, 2018). In Malaysia, the smartphone penetration rates also grew from 75.9% in 2017 to 78% in 2018 and smartphone was most preferred among 93.5% users aged below 20 years old (Malaysian Communications and Multimedia Commission, 2018). The activities of smartphone users in Malaysia includes for communication, social networking, searching and browsing, play games, entertainment as well as utilising the available features such as camera and among Malaysian adolescents, listening to music and playing games were the most popular followed by watching movies or videos (Malaysian Communications and Multimedia Commission, 2018). Amongst children, the usage are mainly for gaming, social networking service use, mobile messengers and internet surfing (Cha & Seo, 2018).

The increasing use of smartphones and its many features have raised a new mental health concern of smartphone addiction and dependency (Acharya et al., 2013; Kwon et al., 2014). Signs of smartphone dependency are also happening in Malaysia whereby one out of 4 users check their phone every 30 minutes or less even with no notifications and 90% of users below 20 years old frequently check their phone before sleeping or in the middle of night and 60% of young users continued using smartphone