

## Social media addiction and depression during healthcare professional education at Eastern University, Sri Lanka

Hazzana H.S.F<sup>1</sup>, Bandara R.M.P.M<sup>1</sup>, Rajapakshe W.R.G.S.D<sup>1</sup>, Sathaananthan T<sup>2</sup>

<sup>1</sup> Faculty of Health-Care Sciences, Eastern University, Sri Lanka

<sup>2</sup> Department of Medical Education and Research, Faculty of Health-Care Sciences, Eastern University, Sri Lanka

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Correspondence to:

Sathaananthan T

sathaananthant@esn.ac.lk

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### ABSTRACT

**Background:** In recent years social media has become a significant asset of students' life. Their life now relies on social media to interact with each other. Addiction to social media is a behavioural addiction characterized by being excessively concerned on social media, driven by an uncontrolled urge to use it that impairs the users' behaviour pattern. Depression is a depressive disorder characterized by sadness, loss of pleasure, feeling of guilty, disturbed sleep or lack of appetite. Evidences suggest that using social media can adversely affect its user's mental health, mainly the young generation. **Objective:** This study aimed to find out the most used social media platform, the level of social media addiction and the relationship between social media addiction and depression among the undergraduates of Faculty of Health-Care Sciences (FHCS), Eastern University, Sri Lanka (EUSL). **Methodology:** A self-administered online questionnaire was used to collect the data after the pilot study. Addiction level was assessed by using "Social Networking Addiction scale". The relationship between social media addiction and depression among participants was analyzed by using Pearson Chi Square test. **Results** This study shows that though the most used platform was WhatsApp (23.8%), majority of the students were not addicted to social media. This study also revealed that there is a high prevalence of depression among undergraduates and there is a positive linear correlation between social media addiction and depression (Pearson Correlation=+0.482) among the undergraduates of FHCS, EUSL. **Conclusion:** Most used platform was WhatsApp and this study shows positive linear correlation between social media addiction and depression.

### Introduction

In recent years social media has become a basic need for students' life. Social media is defined as platforms that assist a user to connect with other users through simple

internet access (Ganie, 2022). Social media addiction is a behavioural addiction characterized by as being excessively concerned about social media, driven by an uncontrolled urge to use it that impairs the

users' behaviour patterns. The number of social media users in Sri Lanka at the beginning of 2022 was equivalent to 38.1% of the total population. Social media addiction has been found to be associated with a host of emotional, relational, health and performance issues (Echeburúa & De Corral, 2010). Students at university have multiple stress factors due to heavy academic workload and other challenges such as living in new environment and caring themselves by adopting to the new normal.

To overcome stress, students may approach social media in an excessive manner and comfortably use diversity of social media in their mobile devices (Aslan & Yaşar, 2020). On the other hand, using social media can adversely affect its users' mental health, mainly of the young generation (Haand & Shuwang, 2020) and the excessive use of social media among young adults is associated with the problems of mental health, e.g. depression, anxiety, stress and self-esteem (Haand & Shuwang, 2020). Depression is defined as depressive disorders that are characterized by sadness, loss of interest or pleasure, feelings of guilt or low self-worth, interrupted sleepiness or loss of appetite, feelings of tiredness and poor attentiveness (Haand & Shuwang, 2020).

This study focused on undergraduates at the Faculty of Health-Care Sciences, Eastern University, Sri Lanka, to find out the most used platform of social media, the level of its addiction and to explore the relationship between its addiction and the depression among undergraduates.

## Methodology

This is a cross sectional descriptive study design. Data was collected from all students at Faculty of Health-Care Sciences, Eastern University, Sri Lanka [MBBS and BScHons (Nursing) undergraduates]. Complete enumeration was used in this study during 2022-2023.

Data was collected via online using self-administered questionnaire. Questionnaire was developed by reviewing the literature and the validity of the questionnaire was done

based on the experts' opinion. Questionnaire has four sections: socio-demographic factors, social media usage, social networking addiction scale and patient health. Addiction level was assessed by using "Social Networking Addiction scale" (Shahnawaz & Rehman, 2020). Data analyzing was done by using statistical package for social sciences version 27 (SPSS V.27) was used to calculate the mean, median, frequency, standard deviation as appropriate. Chi-square test was performed to identify correlation as appropriate. Ethical clearance for this study was obtained from Ethics Review Committee of Faculty of Health-Care Sciences, Eastern University, Sri Lanka.

## Results

### Social media usage

The most used social media platforms among participants were WhatsApp 23.8 % ( n=395) and YouTube 23.6 % ( n=393) (Table 1).

*Table 1 most used social media platforms among undergraduates of Faculty of Health-Care Sciences, Eastern University Sri Lanka*

Social Media Platform	Percentage of usage
Facebook	15.9
Facebook Messenger	7.5
Instagram	12.3
YouTube	23.6
WhatsApp	23.8
TikTok	4.3
Viber	6.0
Pinterest	3.2
Twitter	2.5
LinkedIn	0.8
<b>Total</b>	<b>100</b>

### Social Networking Addiction

Among 405 participants 38.3% of them (n=155) were addicted to social media while 61.7% of the participants (n=250) were not addicted to social media. 36.5% of the participants (n=148) agreed that their mind had remained on social networking site while they were working. 30.9% of the participants (n=125) admitted that they had gone to social networking site instantly after waking up in the morning. Meanwhile 36.3% of the participants

(n=147) agreed that they had checked for update on social networking site while studying. 40% of the participants (n=162) concurred that they had adhered to social networking site when they were upset. While 18.3% of the participants (n=74) agreed that they had felt sad when they were unable to login social networking sites, whereas 26.9% of the participants (n=109) disagreed. Even though 12.8% of the participants (n=51) agreed that they had become irritable whenever they could not login to social networking sites, in the meantime 29.9% (n=121) participants disagree on that.

### **Relationship between social media addiction and depression**

Among the 141 of non-depression participants, 78% of them (n=110) were not addicted to social media and only 22% of the participants (n=31) were addicted to social. Also among 19 of severe depressed participants, 78.9% of them (n=15) were addicted to social media. Significant addiction level on social media was found among the participants of other categories except the participants of mild depression category. There is a significant correlation between social media addiction and depression (Likelihood ratio=47.272, df=4,  $p<0.001$ ). There is a moderate level of association between participants' addiction on social media and the level of depression (Cramer's  $V=0.340$ ). According to the Pearson Correlation test, the value of +0.482 indicated positive linear relationship between social media addiction and depression

### **Discussion**

This study revealed the fact that the mostly used social media platforms were WhatsApp and YouTube respectively. The study on 'The usage of social media during Covid-19 lockdown period of 2020 in Sri Lanka' indicated the mostly used social media platforms were Facebook and WhatsApp (Jinasena & Weerasinghe, 2022b). Another study on "Nature of social media usage by university students in Sri Lanka" in 2021 found that Facebook was the most frequent social media site for networking purposes (Athukorala, 2021). But in this study it was WhatsApp that was marked as the most frequently used social

media platform (23.8%) followed by YouTube which is similar to the study was done on Social media: usage and influence on undergraduates studies in Nigerian universities where it was stated that the mostly used social media platforms were WhatsApp (97%) and Facebook (85%) (Tayo, Adebola, & Yahya, 2019).

According to this study 38.3% of the participants were addicted to social media while a study on "Association between social media addiction" at International Islamic University Malaysia (IIUM) undergraduate nursing revealed that 3.4% had no addiction to social media and 96.6% had some degree of addiction on social media (Azenal & Zaw, 2021). In this study the prevalence of social media addiction was higher whereas our study revealed that the prevalence of no addiction is higher than the social media addiction. Therefore, findings of this study take a deviation from the findings of our current study.

From our study it was revealed that 65.2 % of the population is having some degree of depression. (Mild depression - 36.0%, Moderate depression - 17.0 %, moderately severe - 7.4%, & severe - 4.7%) and 34.8% of the population is not having depression. The relationship between social media addiction and depression among participants revealed that there was a significant correlation between social media addiction and depression (Likelihood ratio = 47.272, df = 4,  $p<0.001$ ). Among non-depression participants, 78% were not addicted to social media. Also among participants with severe depression participants 78.9% was addicted to social media. Significant addiction level on social media was found among the participants of other categories except the participants of mild depression category. Further it revealed that there is a moderate level of association between participants' addiction on social media and level of depression (Cramer's  $V=0.340$ ). A pairwise Z test using Bonferroni method showed that moderately severe and severe depression levels are were associated with social media addiction and non-depression cases were not associated with addiction ( $p<0.005$ , Adjusted Residual  $>-2.807$ ). Moreover, according to the Pearson Correlation test, the value of +0.482 indicated

positive linear relationship between social media addiction and depression.

Therefore, there is a significant moderate positive linear correlation between social media addiction and depression among the undergraduates. Further, there's a high prevalence of depression among undergraduates.

## Conclusion

WhatsApp is the most widely used social media platform. Among the participants, 61.7% were not addicted to social media, and 34.8% did not experience depression. However, there is a significant correlation between social media addiction and depression levels. This correlation is moderate, indicating a notable link between the two factors. Furthermore, a positive linear relationship between social media addiction and depression among undergraduates was noted.

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