



Original Research Article

ASSOCIATION OF MOBILE SCREEN TIME AND STRESS, ANXIETY, AND DEPRESSION IN YOUNG ADULTS

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ABSTRACT

Background: Mobile phone usage has increased drastically in the present day, and that increases sedentary behaviour like using the mobile phone in a lying down posture or in a sitting posture without any physical activity. Earlier studies assessed the reaction between the screen time with the depression mainly not with anxiety and stress scores. **Aim and objectives:** The present study was undertaken to assess the screen time in young adults and assess the depression, anxiety, and stress scores.

Materials and Methods: The present cross-sectional study recruited a total of 100 young adults after obtaining voluntary, written, informed consent. Mobile screen time was recorded using Apple's Screen Time and Google's Digital Wellbeing apps, respectively. Depression, anxiety, and stress scores were recorded using the DASS 21 questionnaire, which is a self-administered questionnaire.

Results: Depression scores were significantly higher in the individuals using screen time for more than 6 hours. Anxiety scores were significantly higher in the individuals using screen time for more than 6 hours. Stress scores were significantly higher in the individuals with screen time of more than six hours.

Conclusion: The present study results support that excessive screen time is associated with the excess amounts of depression, anxiety, and stress. Further detailed studies are recommended in this area and also to recommend to educate the young adults regarding excessive use of mobile phones.

Keywords: Stress, Screen time, Young adults, Anxiety, Depression.

INTRODUCTION

Mental health is the most important public health concern, with about 14 percent of adolescents being affected.^[1] In recent years, there has been a decline in physical activity and an increase in sedentary behaviour in young adults due to increased addiction to mobile phones.^[2,3] Mobile phone usage has increased drastically in the present day, and that increases sedentary behaviour like using the mobile phone in a lying down posture or in a sitting posture without any physical activity.^[4] Earlier studies assessed the reaction between the screen time with

the depression mainly not with anxiety and stress scores.^[5,6] It was reported that individuals who use screen time for more than six hours are more depressed than those who use it for two hours or less.^[7] The media content in the mobile apps and videos affects the cognitive and emotional behaviour of the individuals and increases the symptoms of anxiety.^[8] Many studies testified that excessive screen time was positively associated with stress and anxiety.^[9,10] Further, during the Covid pandemic, all these young adults were forced to use gadgets for online studies and classes.^[11] Child development was also reported to be affected by the

excessive use of mobile phones.^[12] Hence, it is very much needed to educate the young adults regarding the dangerous effects of excessive screen time and prevent further consequences. The present study was undertaken to assess the screen time in young adults and assess the depression, anxiety, and stress scores in them and educate them regarding the hazardous effects of excessive screen time.

Aim and objectives: The present study was undertaken to assess the screen time in young adults and assess the depression, anxiety, and stress scores.

MATERIALS AND METHODS

The present cross-sectional study recruited a total of 100 young adults after obtaining voluntary, written, informed consent. The study protocol was approved by the institutional ethics committee. Willing participants within the age group of 18-24 were part of the study after obtaining the written informed consent. Those who use Android mobiles or iPhones were included in the study. Individuals with any severe complications were excluded from the study. After the recruitment, all the participants were subjected to a general physical examination. Mobile screen time was recorded using Apple's Screen Time and Google's Digital Wellbeing apps, respectively. After recording the screen time, the participants

were grouped into groups based on their screen time use. Those using less than two hours, those using 2-4 hours, those using 4-6 hours, and those using more than 6 hours. One week of screentime was recorded, and the average time was considered as the screen time of the individual. Depression, anxiety, and stress scores were recorded using the DASS 21 questionnaire, which is a self-administered questionnaire.^[13]

Statistical Analysis: Data was analyzed using SPSS 22.0 version. Descriptive statistics were used to assess the screen time and grouping of the subjects. Data of scores of depression, anxiety, and stress were reported as mean and SD. A probability value of less than 0.05 was considered significant.

RESULTS

Data was presented as mean and SD. Table 1 presents the screen time and depression, anxiety, and stress scores in the young adults. Depression scores were significantly higher in the individuals using screen time for more than 6 hours. Anxiety scores were significantly higher in the individuals using screen time for more than 6 hours. Stress scores were significantly higher in the individuals with screen time of more than six hours.

Table 1: Screen time and depression, anxiety, and stress scores in the young adults

Screen time	Depression	Anxiety	Stress
<2 hours	13.17±1.27	9.27±1.35	12.73±1.35
2-4 hours	13.46±1.61	12.50±1.78	15.18±1.83
4-6 hours	14.17±2.12	14.91±1.97	23.50±2.84
>6 hours	19.17±2.86	18.1±1.60	28.83±2.92

Data was analyzed as mean and SD.

DISCUSSION

The present study was undertaken to assess the screen time in young adults and assess the depression, anxiety, and stress scores. Depression scores were significantly higher in the individuals using screen time for more than 6 hours. Anxiety scores were significantly higher in the individuals using screen time for more than 6 hours. Stress scores were significantly higher in the individuals with screen time of more than six hours. The present study results support that excessive screen time is associated with the excess amounts of depression, anxiety, and stress. Further detailed studies are recommended in this area and also to recommend to educate the young adults regarding excessive use of mobile phones. Excessive use of the smartphone can be seen in the present generation.^[14] Multiple benefits have been reported by using mobile phones as it simplifies life like paying the bills, banking, etc. At the same time, there are multiple dangerous effects followed by excessive usage of mobile phones.^[15-17] Excessive usage of mobile phones leads to excessive anxiety and stress and a lack of sleep. Lack of sleep leads to daytime sleepiness and

irritability, and it continues like a vicious cycle. This will cause a decline in the quality of life, both physical and psychological. Excess use of mobile phones causes addiction to smartphones. Excessive addiction to mobile phones is seen in females when compared with males. Compared to all the age groups, young adults were reported to adopt faster. Addiction to the mobile phone adversely affects the attention and concentration that are most important for the student population. Hence, poor study outcomes are observed. This will again increase the stress and anxiety. Hence, young adults must be screened regularly and educated about the consequences of excessive use of mobile phones.

CONCLUSION

The present study results support that excessive screen time is associated with the excess amounts of depression, anxiety, and stress. Further detailed studies are recommended in this area and also to recommend to educate the young adults regarding excessive use of mobile phones.

Conflicts of interest: None declared

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