



A study to assess the screen time usage among adults and their knowledge regarding its impacts on health in selected colleges at Bagalkot

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Abstract

Background of the study: Excessive use of screen device may lead to health problems use of screen media has a wide range of cognitive consequence with both beneficial and deterrent effects. Screen can improve education learning; however, too much screen time spent in front of a screen and multitasking with other media has been related to worse executive functioning and academic performance. Excessive screen usage has effects on sleep, mental health conditions including depression and anxiety. it can abstract the ability to interpret emotions, fuel aggressive conduct and harm one's psychological health in general.

Aim of the study was to assess the screen time usage among adults and their knowledge regarding impact of screen time usage on health.

Methods: A descriptive research study was conducted with the aim to assess the screen-time usage and their knowledge regarding its impact on health among 100 adults in Bagalkot College of Nursing Bagalkot. Convenient sampling technique was used to select the college and proportionate stratified random sampling technique was use to select the participants. Data related to screen time usage and its impacts on health was gathered by using structured interview schedule with the help of structured knowledge questionnaire. The adults who were willing to participate in the study were selected. Frequency and percentage distribution were used to describe the variables under the study and chi square test was used to find out the association between knowledge regarding its impact on health with selected socio-demographic variables.

Results: In the present study 84% of adults were in the age group of 20 years, 80% belongs to Hindu religion and 28% adults were having more than 3 mobile phones at home, 66% of participants are females and 78% were studying B Sc Nursing. 56% adults were using screen for more than 3 Hrs per day, 89% of participants' most commonly used screen device was mobile, 77% were using mobile phone in the evening. 90% of adults screen usage place was home and for 39% of adults the influencing factor for mobile usage was social media, for 81% participants mobile phone was most likely used screen device, for 74% adults mobile phone was the comfortable screen device and for 59% participants mobile phone was used for the purpose of study. Description of adults based on their knowledge regarding ill effects of screen time usage showed that 24% adults were having average knowledge following this 21% were having good, 18% poor, 15% very good, 12% excellent and 10% participants were having very poor knowledge. Variables like age, gender and number of mobile phones at home were having significant association with knowledge regarding impact of screen time usage.

Conclusion: After analyzing the facts of the present study it concludes that girls use more mobile phones than boys, more number of participants are having less knowledge regarding ill effects of screen time usage on health i.e impact on physical health like – sleep disturbance, eye strain and vision problems, sedentary behavior and mental health like – anxiety and stress, depression addiction, poor academic performance in school, lack of social relations and memory loss.

Keywords: Screen time usage, adults, Knowledge, Impact on health and assessment

Introduction

“Screen time usage” refers to the total amount of time a person spends actively interacting with electronics devices like computers, smart phones or televisions, encompassing activities like watching videos, browsing the internet or playing games. Children, adolescent and adults are spending an increasing amount of time engaging in sedentary behaviors. A growing body of evidence suggest that sedentary behaviors including screen related activities may increase the risk of cardio metabolic disease [2]. In western India the screen time is 2.7hours per day among children

aged 2-6years. The recommended screen use time limit is considered to be 2hour per day. However, studies have shown that screen use time has increased to as much as 7hour per day in groups aged 8-18year in the India. In 2021, the number of smart-phone users in India reached 492.78million, which accounts for about 16.93% of the total users worldwide [3].

According to current data a normal screen time usage for adults is considered to be around 2-4 hours per day outside of work with recommendations to limit recreational screen time to around 2 hour per day to maintain a healthy balance.

Children and teenagers generally have lower recommended screen time limits compared to adult ^[4]. Abnormal screen time usage refers to spending an excessively more than 2 hours on digital devices like smart-phones, computers, television or tablets to the point where it negatively impacts in physical, mental or social well-being. According to recent report Indians spend an average of around 7.3 hours per day on their phones. Excessive screen time can negatively impact on health in several ways including disrupting sleep pattern, causing eye strain, neck pain, poor posture and potentially contributing to mental health issues like depression and anxiety ^[5].

To overcome excessive screen time and protect health – one can set clear screen time limits, Create screen free zones, avoid using devices before bed, take regular breaks, turn off notifications, designate screen free days engage in alternative activities, monitor your usage, remove unnecessary app, mindful usage ^[6].

Potential Benefits of Reducing Screen Time are - Improved sleep quality, enhanced focus and concentration, increased physical activity, stronger social connections, reduced eye strain and headache ^[7].

Materials and Methods

Study design: A non-experimental descriptive study was conducted among adults to assess the screen time usage and their knowledge regarding impact of screen time usage

Study area: The present study was conducted in BES Bagalkot college of Nursing Bagalkot

Population and sample: In the present study population refers to adults aged between 18 to 23 years residing in Bagalkot and sample for the present study was adults in the age group of 18-23 years studying in BES Bagalkot College of Nursing Bagalkot.

Inclusion criteria: Adults aged 18-23 years, studying in BES Bagalkot college of Nursing Bagalkot, available at the time of data collection and who provided consent.

Exclusion criteria: Adults who are un-cooperative and who are unfit either physically or mentally that would interfere with the process of data collection.

Sample size estimation: Based on NFHS-5 prevalence of screen time usage in India 56.5% and using the formula $N = 4PQ/I^2$, where P is Prevalence, Q=100-P, and I is the allowable errors (20% of P), the calculated sample size was 85. Considering possible missing or incomplete data, the final sample size was fixed at 100.

Sampling technique: Researcher followed proportionate stratified random sampling technique to select the sample.

Source of data: Adults in the age group of 18-23 years studying in BES Bagalkot College of Nursing Bagalkot.

Data collection instruments: Data related to screen time usage and its impact on health were collected by using

structured knowledge questionnaire. Data collection instruments were divided into 3 sections as follows.

Section – I Base line data: Includes 8 items related to demographic characteristics of participants.

Section – II Structured knowledge questionnaire: Includes 8 items to assess the screen time usage of participants.

Section – III Structured knowledge questionnaire: Includes 18 items to assess the knowledge regarding impact of screen time usage on health.

Data collection procedure

- Prior permission was taken from institutional ethical committee BES Bagalkot college of Nursing Bagalkot
- Permission was obtained from Principal BES Bagalkot college of Nursing Bagalkot
- Informed consent was obtained from the participants
- Data were gathered from participants between 9am to 5pm
- Structured interview schedule was conducted to collect the information from participants

Statistical analysis: Descriptive statistics like frequency and percentage was done for sample description, screen time usage among participants and knowledge regarding impact of screen time usage on health. Chi square test was done to find the association between knowledge of adults regarding impact of screen-time usage with their selected socio-demographic variables.

Ethical approval

- Prior permission was taken from institutional ethical committee BES Bagalkot college of Nursing Bagalkot
- Permission was obtained from Principal BES Bagalkot college of Nursing Bagalkot

Results

The results in the present study is discussed under 4 sections.

Section I: Description of Socio-demographic Variables of adults.

Table 1: Depicts the highest frequency and percentage of respected variable related to Socio-demographic characteristics of sample

Sl. No	Variable	Category	Frequency	Percentage
1	Age	20 Years	84	84%
2	Religion	Hindu	80	80%
3	Number of Mobile phones at home	More than 3	28	28%
4	Father occupation	Farmer	47	47%
5	Mother occupation	Housewife	74	74%
6	Gender	Female	66	66%
7	Education	B.Sc. Nursing II Semester	78	78%
8	Head of the family	Father	81	81%

Section II: Description of Screen-time usage of adults

Table 2: Depicts the highest frequency and percentage of variables related to screen time usage of sample

Sl. No	Variable	Category	Frequency	Percentage
1	Screen Hours/Day	More than 3 Hrs	56	56%
2	Screen used most commonly	Mobile screen	89	89%
3	Timings of mobile usage	Evening	77	77%
4	Place where mobile screen is used	Home	90	90%
5	Influencing factor for mobile screen usage	Social media	39	39%
6	More likely screen device	Mobile phones	81	81%
7	Comfortable screen device for usage	Mobile phones	74	74%
8	Screen device used for study	Mobile phones	59	59%

Section III: Description of adults based on their knowledge regarding impact of screen-time usage

Table 3: Depicts the level of knowledge of adults regarding impact of screen-time usage

Sl. No	Level of Knowledge	Frequency	Percentage
1	Excellent	12	12%
2	Very good	15	15%
3	Good	21	21%
4	Average	24	24%
5	Poor	18	18%
6	Very poor	10	10%

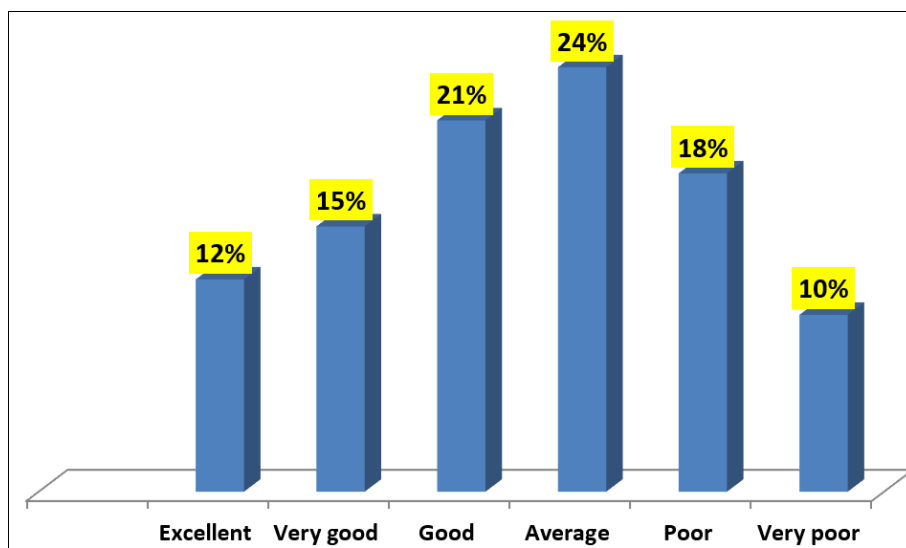


Fig 1: Level of knowledge of adults regarding impact of screen-time usage

Section IV: Association between knowledge of adults regarding impact of screen-time usage with their selected socio-demographic variables

Table 4: Association between Adults' Knowledge of Screen-Time Impact and Selected Socio-Demographic Variables (using Chi-square Test)

Sl. No.	Socio demographic variables	Df	Chi-square value	Table value	Level of significance	Inference
1	Age*	1	6.05	5.99	0.05	S
2	Religion	1	2.19	3.84	0.05	NS
3	Number of Mobile phones at home*	1	5.23	3.84	0.05	S
4	Father occupation	1	0.056	3.84	0.05	NS
5	Mother occupation	1	0.005	3.84	0.05	NS
6	Gender*	1	6.74	3.84	0.05	S
7	Education	1	0.19	3.84	0.05	NS
8	Head of the family	1	0.95	3.84	0.05	NS

There was a significant association between the knowledge of adults regarding impact of screen time usage on health with their selected socio-demographic variables like age,

number of mobile phones at home and gender, whereas There was no significant association found between the knowledge of adults regarding impact of screen time usage

on health with their selected socio-demographic variables like religion, father occupation, mother occupation, education and head of the family.

Conclusion

The present study concluded that screen time usage has negative effects on physical physiological and biological health of adults hence it is advised to reduce screen time usage and to involve in outdoor activities.

Conflict of Interest

Not available.

Financial Support

Not available.

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