IMPACT OF CELL PHONES OF FEMALE UNDERGRADUATES: A SOCIOLOGICAL STUDY OF SINDHANUR TALUKA

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Abstract

In the technology era, the advancement in technology the cell phones have grown ever more in the past few years, and the imperative segment of cell phone users comprised of undergraduate college female students. In the present paper, an attempt has made to analyse the cell phone usage pattern of female college students. The present study investigates the prevalence of smartphone addiction and the associated factors in undergraduate college female students. The researcher used. The Cell phone Addiction Scale short version (SAS-SV) used to assess smartphone addiction among the students. This study was conducted in 2019 and included 200 undergraduate female students at Sindhanur taluk of Raichur district in Karnataka state. The study used to assess smartphone addiction among female students, demographic character, smartphone usage, and sociological behaviour data were collected. The various factors associated with smartphone addiction in female students were the use of game apps, anxiety, and poor sleep quality. Significant factors for female undergraduates were the use of multimedia applications, the use of social networking services, depression, anxiety, and poor sleep quality. Smartphone addiction was common among the college students investigated. This study identified associations between smartphone usage, sociological, behavioural factors, and cell phone addiction of female undergraduate students. However, the results suggest the need for interventions to reduce smartphone addiction among female students.

Keywords: Impact of cell phone, Female, Undergraduate Students, Smartphone addiction and Sindhanur.

I. INTRODUCTION:

India has the second-largest cell phone users globally after beating the US recently by crossing 220 million active users of the cell phone in 2015 (http://articles.economictimes. indiatimes.com). Smartphone ownership among young adult, especially college going students, has been consistently elevated. They use their cell phones as a persistent communication technology. In recent years, smartphones are getting more powerful by including amazing features. Today's smartphones are providing it is users a one-stop solution to all their basic needs. Many devices such as a watch, camera, GPS, calculator, diary, recorder, music player, etc. have been replaced by smartphones. Students use their smartphones as a tool of entertainment, health guide, knowledge hub, social lifeline, and much more. The impact of smartphones on the world is immense as they create another business arena—mobile commerce or m-commerce.

Few researchers have worked on the usage pattern of mobile phones, and it is related to the demographics of respondents. A study conducted on cell device usage found that 57% of cell phone users use their phones mostly for social purposes and around 50 % users carry their phones with them all the time (Wireless Phone Reliance Grows, 2001). Van Biljon, J. and Kotzé (2008) argued that demographic, social, cultural, and contextual factors influence mobile phone usage that complicates the understanding of mobile phone usage.

Mobile phones are popular among university students, increasing their social inclusion and interconnectedness over and above providing a sense of security as they can contact others in times of distress or emergency. The security angle and mobile use have drawn this researcher to this subject, and an attempt has also made how far a mobile can help in this vital area. Little study has done on this subject.

II. STATEMENT OF THE PROBLEM:

A study in New Zealand by Dresler Hawre and Mansuelt indicated that over half of the undergraduate students admitted to constantly checking their mobile phone for missed calls and messages. The majority of these were female students indicating that female students showed a more significant sign of addiction to their mobile phone. The three main reasons the female undergraduate students needed to communicate are for inclusion (need to belong), control, and affection (need to love

or be loved). Though being readily contactable was found to be an advantage, it also noted that it could be a drawback as contact could occur at inappropriate times. Phone calls during class lectures divert students' and teachers' attention and lead to a communication problem. Cell phone addiction is a type of behaviour associated with groups of negative symptoms such as disregard of harmful consequence, preoccupation, productivity loss and feeling of anxiety and loss.

III. LITERATURE REVIEW:

Aoki and Downes (2003) focused on the social and psychosomatic aspects of cell phone usage among college students. They argued that necessity in modern times, cost efficiency when compared to a landline phone, safety or security, and dependency are the reasons for adoption.

Butt and Phillips (2008) exposed the relationship between the personality of a mobile phone user and the amount of time spent on the mobile phone and also the preference of using text or making a call for communication.

Zulkefly and Baharudin (2009) studied mobile phone use, particularly for the students of the University of Putra Malaysia. They have determined various factors related to its use and impact on student's psychological health.

Farrell (2012) established a pattern in the usage of mobile phones and estimated the age of the mobile phone user by analysing their call data record. He has shown that the mobile user's age based on the ages of the people they call and the intensity of their relationship.

Sarraute, Blanc, and Burroni (2014) detected substantial inconsistencies in mobile phone usage among the subgroups of Mexican population for different age and gender.

Patel and Rathod (2011) conducted an exploratory study for mobile usage habits of students commuting from the rural area to nearby towns. They discussed the reasons for buying a phone, brand preferences and perceptions regarding service quality.

IV. RESEARCH QUESTIONS:

1. What is the most used purpose of a cell phone by the female students?
2. What challenges do they face in using a cell phone?

V. OBJECTIVES OF THE STUDY:

1. To study the association between socio-economic of respondents and their addiction to using the cell phone.
2. To study the association between the social status of students and their perception about/of using a cell phone.

VI. RESEARCH METHODOLOGY:

The research conducted by using the procedure of survey method and the primary data have collected from female undergraduate students in Sindhanur taluk in Raichur district of Karnataka state. Convenience sampling used for data collection. The sample size used is 200. The researcher has used both the quantitative and qualitative methods for this study. Also used are primary data collection tools and secondary sources—the Smartphone Addiction Scale short version (SAS-SV) method used to assess smartphone addiction among the students. Data gathering instruments used for this study are questionnaire and focus group discussion. The subjects for the group discussion were selected based on the usage pattern (regularity) of cell phones. This study tells us how female students use their cell phones and why besides the merits and demerits of using cell phones. It should be a source of information for other readers and researchers.

VII. RESULTS AND DISCUSSION:

The information collected included primary socio-demographic data, such as age, academic year, residence (urban/rural), and the monthly cost of living. Specific information regarding smartphone use included the age at which they obtained their first smartphone, the most-often-used functions (phone call/message, games, video watching/listening to music, social networking services, internet surfing/e-book reading, and others), daily smartphone use time, addiction of cell phone and frequency of replacement of their smartphones.

The final sample included 200 undergraduate female students. They were aged 17– 26 years (mean age, 64.00 ± 1.60 years). The urban participants were high (51%) and the on an average cost of living per month was equal ant to Rs.400. Further, selected female respondents were browsing the internet (31%). However, in

the study area there 26% of the respondents were affected by the highest usage of cell phones. Likewise, anxiety per cent was 6%, and lastly, 7.50% per cent of them were depressed using cell phones in the study area.

Table-1

Demographic Characteristics of the Female Undergraduate Student

SN	Particulars	No	%	P-Value
1	**Age (years)**			
	≤19	128	64.00	0.120
	≥20	72	36.00	
	Total	200	100.00	
2	**Residential source**			
	Rural	98	49.00	0.022
	Urban	102	51.00	
	Total	200	100.00	
3	**Monthly Cost of Living**			
	≤Rs.400	110	55.00	0.008
	Rs.500–600	62	31.00	
	≥Rs.700	28	14.00	
	Total	200	100.00	
4	**Most personally relevant smartphone function**			
	Phone calls/Text message	22	11.00	0.000
	Smartphone gaming	24	12.00	
	Multimedia applications (Watching videos/Listening to music)	36	18.00	
	Social networking services	62	31.00	
	Internet surfing/reading	48	24.00	
	Others	8	4.00	
	Total	200	100.00	
5	**Cellphone addiction**			
	Negative	148	74.00	0.662
	Positive	52	26.00	
	Total	200	100.00	
6	**Sleep quality**			
	Good sleep quality	186	93.00	0.044
	Poor sleep quality	14	7.00	
	Total	200	100.00	
7	**Anxiety**			
	Negative	188	94.00	0.000
	Positive	12	6.00	
	Total	200	100.00	
8	**Depressive**			
	Negative	185	92.50	0.023
	Positive	15	7.50	
	Total	200	100.00	

Source: Filed study

Table 2 represents the statistical analyses of various factors connected to the impact of cell phone addiction of female undergraduate students age, playing of smartphone games, higher monthly cost for living, smartphone media applications, poor sleep quality, depression, and anxiety was associated with using of cell phone impacts.

Table-2

Statistical analysis of the factors associated with smartphone addiction undergraduate girl student genders

SN	Particulars	Positive Cell Phone Addiction		Negative Cell Phone Addiction		OR (95% CI)		P-value
		No	%	No	%			
1	**Age (years)**							
	≤19	52	26.00	148	74.00	Ref.		
	≥20	66	33.00	134	67.00	1.4	(1.02-1.92)	0.04
2	**Residential source**							
	Rural	62	31.00	138	69.00	Ref.		
	Urban	64	32.00	136	68.00	1.22	(0.88-1.68)	0.226
3	**Monthly Cost of Living**							
	≤Rs.400	60	30.00	140	70.00	Ref.		
	Rs.500–600	56	28.00	144	72.00	1.09	(0.77-1.56)	0.625
	≥Rs.700	80	40.00	120	60.00	1.87	(1.19-2.94)	0.006
4	**Phone calls/Text message**							
	Not main function	75	37.50	125	62.50	Ref.		
	Main function	52	26.00	148	74.00	0.49	(0.35-0.70)	0.00
5	**Smartphone gaming**							
	Not main function	62	31.00	138	69.00	Ref.		
	Main function	38	19.00	162	81.00	0.53	(0.11-2.49)	0.631
6	**Multimedia applications (Watching videos/Listening to music)**							
	Not main function	58	29.00	142	71.00	Ref.		
	Main function	62	31.00	138	69.00	1.46	(0.97-2.19)	0.071
7	**Social networking services**							
	Not main function	58	29.00	142	71.00	Ref.		
	Main function	79	39.50	121	60.50	2.18	(1.58-3.00)	0.000
8	**Internet surfing/reading**							
	Not main function	58	29.00	142	71.00	Ref.		
	Main function	40	20.00	160	80.00	0.59	(0.25-1.38)	0.217
9	**Others**							
	Not main function	60	30.00	140	70.00	Ref.		
	Main function	44	22.00	156	78.00	0.67	(0.28-1.56)	0.348
10	**Sleep quality**							
	Good sleep quality	43	21.50	157	78.50	Ref.		
	Poor sleep quality	86	43.00	114	57.00	2.73	(1.98-3.78)	0.000
11	**Anxiety**							

	Negative	54	27.00	146	73.00	Ref.		
	Positive	122	61.00	78	39.00	4.2	(2.34-7.56)	0.000
12	**Depressive**							
	Negative	50	25.00	150	75.00	Ref.		
	Positive	89	44.50	111	55.50	2.47	(1.73-3.52)	0.000

Source: Author Calculation

For the 200 female students, the following variables were significant factors associated with smartphone addiction: multimedia applications (aOR = 2.22; 95% CI: 1.37 – 3.59); social networking applications (aOR = 2.63; 95% CI: 1.81 – 3.81); PSQI (aOR = 2.12; 95% CI: 1.50 – 2.99); SAS (aOR = 2.31; 95% CI: 1.18 – 4.51); and SDS (aOR = 1.84; 95% CI: 1.21 – 2.79). These discrepancies could be due to the different instruments and classification methods used, and also differences among the participants in the different studies. However, the high prevalence rate identified in the current study is an indication of potential public health concern posed by smartphone use among female undergraduate students at Sindhanur taluk. The results of this study showed no significant gender differences in the prevalence of smartphone addiction (29.3% in females, $p > 0.05$). In the present study, whereas undergraduate female students were more inclined to use the cell phone communication functions and social networking services. For females, the cell phone is a means of social contact, in which messaging and social networks play prominent roles, while for males, a more diversified type of usage observed, involving text messages, voice conversations, and gaming applications.

VIII. MAJOR FINDINGS OF THE STUDY:

- There was some evidence that smartphone overuse was associated with various psychological and behavioural problems, such as depression, anxiety, and sleep disturbance.
- The depressed female undergraduate students use their smartphones as a coping strategy to deal with their negative emotions.
- Excessive smartphone use at night could keep one up late, thus impairing sleep and influencing stress and depression.
- The cell phone overuse may lead to depression or anxiety, which can, in turn, result in sleep problems.
- The present study is consistent with those of previous studies concerning the over-use of smartphones and its relationship to depression, anxiety, and poor sleep quality.

- In the present study, some cell phone applications and psycho-behavioural factors associated with smartphone addiction to the use of multimedia and social networking applications were predictors for females.

IX. CONCLUSION:

The present study found the impact of cell phone addiction among undergraduate female students. The study also found that multimedia and social networking applications were predictors for females. Female students frequently used their cell phone for contacting parents, relatives, friend and others, respectively. Female students use cell phone maximally for direct call chatting or texting information searching on the internet, internet calling, for capturing events, receiving incoming video calls, for editing home photos, sending a message with pictures, browsing the internet, and playing different games. Female students mostly used cell phones find out when they have free time, at Wi-Fi connection area, in the class room, and during a reading at library respectively. It recommended that the following issues be threadbare examined and explored for further study. Female cell phone users feel stressed when their cell phone is not in their hand or is off. It is on account of addiction. This issue explored in greater detail. They are considering the gender differences in smartphone addiction highlighted by the present study, targeted prevention and intervention strategies based on a multi-component strategy to reduce this behavioural and social problem recommended.

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