

# Prevalence of Smartphone Addiction among University Students during Covid-19

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## Abstract

**Background:** Cell phone has become a significant piece of our lives. Its utilization has been expanded particularly these days because of Covid-19 circumstance which is quick spreading and conceivably lethal, presenting home isolate, social separating, and expanded web and cell phone use internationally and everybody is dependent on the cell phones. **Objective:** Prevalence of smartphone addiction among university students during Covid-19 in the age group of 18 to 27 year old. **Method:** A cross sectional study was led through an online strategy among university students of 18 to 27 years old. Sample size was determined through RAOSOFT programming test size mini-computer, Certainty level 95%, Sample size=125 Equation  $n = N \times ((N-1) E^2 + x)$  for information-assortment strategy. Smartphone addiction proneness scale was utilized. The information was examined through SPSS 23 statistical software. **Results:** Among 125 members, 46.40% members invested a great deal of energy in utilizing cell phones. 45.6% attempted to lessen the time spent on cell phone however fizzled. The predominance of habit was 50.45% among this populace, since they can't envision their existence without a cell phone. **Conclusions:** It was closed from above outcomes that cell phone habit was high among university students since members in this investigation can't diminish their time spend on cell phone. Investing a ton of energy in cell phone make them unfit to manage their job on schedule. [12]

**Keywords:** Smartphone; Addiction; COVID-19; University students

## Introduction

Web is exceptionally valuable for such countless assortments of purposes, which incorporate helpful electronic trade, quick and quick sharing of data between one another, for passionate help, and give diversion.

Thus, these Cell phones consolidate the administrations of the Web and the cell phone.

Cell phones subjectively offer various types of assistance when contrasted with the advantages that the Web offers. [1]

These days, Cell phones have become a significant piece of our everyday lives that these gadgets are cell phones as well as being indeed hand-held gadgets that keep us on time in our day-by-day exercises and furthermore permit us to stay in contact with our loved ones.

In addition to the uses already listed above, cell phones are additionally utilized for participating in video gatherings, downloading our main tunes and films, and a large group of

different capacities that were once thought to be difficult to perform on a little gadget. [2]

One reason that the cell phones are surprisingly so famous is that these make everybody's lives more helpful. In any case, contingent upon a cell phone might make many dangers to the general public.

This dependence of cell phone as of late has become a significant issue in our public. As indicated by the investigations identified with the advancement of cell phone enslavement scale, cell phones additionally caused manifestations of dependence like the impacts of the web. [3]

These cell phones seem to work with learning by expanding intelligence and giving simple admittance to assets and data. Improvement of correspondence with the associates and

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**How to cite this article:** Anwar N. Prevalence of Smartphone Addiction among University Students during Covid-19. AMHSR. 2021;11:

educators and sharing data are among the vital benefits of cell phones. In any case, aside from its benefits, there are a few detriments too.

Cell phone abuse can cause such countless issues, which incorporate memory and focus issues, actual irregularities, changes in eating conduct and rest. [4]

University students are among the age bunches most designated by correspondence advances. They are additionally generally keen on having cell phones on which they invest energy and commit quite a bit of their reasoning. The opposition between cell phone organizations to create low-valued gadgets has prompted a huge expansion in the quantity of university students having cell phones, which, thus, improves the probability of cell phone expansion among university students. [5]

Along these lines, the advanced mobile phone utilization among university students appears to give an advantage to the students in numerous viewpoints, yet has additionally prompted risky reliance over cell phones in this computerized time. It has expanded significantly in the course of recent years. It is assessed that near 2.32 billion individuals in the overall populace own a Cell phone. Risky Cell phone use can be characterized as an over reliance on PDAs and the powerlessness to manage its utilization, regardless of encountering sick impacts and unwanted results in day by day living. [6]

It is just a long time since Apple organization dispatched the telephone interestingly; yet hazardous Cell phone use has now become another test to populace wellbeing. Risky utilization of the cell phone can be characterized as a powerlessness to manage one's utilization of the cell phone, which in the long run includes adverse results in every-day life which incorporates monetary issues and numerous others.

The assessed commonness is up to 38%, contingent upon the setting in UK, USA, China, definition, and scales used to measure an individual's conduct. UK grown-ups are online on normal for a day out of each week (25h), 40% go online in excess of 10 times each day and 10% in excess of 50 times each day. [7]

Presently nowadays, enslavement not just means the compulsion of medication or substance misuse, however it likewise alludes to betting, web surfing, messing around, or even advanced mobile phones. These likewise fall under the classification of social habit. The ordinary symptomatic framework stringently respects just side effects brought about by tedious and over the top substance use as fixation. Notwithstanding, presently normal individuals as well as utilize the term 'compulsion' for the individual who is fixated on a specific movement that outcomes in aggravation of his/her every-day exercises and furthermore shows an example like substance reliance. This new kind of fixation has been brought about by quick creating media including web and PDAs in cutting edge IT businesses. [3]

Exorbitant cell phone utilization can cause actual wellbeing related issues like obscured vision and torment in the wrists

or neck. It might cause maladaptive conduct troubles, meddle with school or college or work, lessen genuine social collaboration, and lead to relationship issues. [8]

A few investigations revealed that undeniable degrees of cell phone dependence were connected with low confidence, dejection, sadness, and timidity in individuals. [9]

As of late, there has been an incredible expansion in the quantity of cell phone clients who are going through a lot of cash to claim the most recent updates, renditions, games, and applications. Cell phone clients have gotten so joined to their cell phone that they currently feel they can't work and live without it and their utilization and distraction with the cell phone brings about the disregard of different tasks a lot of their day by day living. This silly abuse is portrayed as advanced cell dependence and analysts define this as a fixation.

This kind of fixation is probably going to be the most genuine and dangerous and the most predominant of all addictions. It is normal that cell phone clients live in detachment. This habit can likewise influence people both monetarily and mentally. [5]

Cell phone enslavement can be referenced as quite possibly the main social issues brought about by the exorbitant utilization of cell phones. Griffiths portrays innovative dependence as a conduct and non-dependence on drugs that is made by the association with the gadget. Portable compulsion has been presented as a sort of innovation related problems in the fifth Global Grouping of Mental Issues. Decreased social relations and expanded feeling of depression are the probable results of exorbitant cell phone use. [10]

The Coronavirus pandemic, and related home isolate and social removing, have broadly expanded tension and negative feelings in the public arena and cell phone dependence in understudies. [11]

So therefore, our primary focus was to investigate the prevalence of smartphone addiction among university students during COVID-19 to find out if it's increased or not.

## Methodology

### Inclusion Criteria

- Members: matured 18 to 27 years old.
- University students that claimed a cell phone were welcome to partake in the investigation.
- Male and female the two patients were incorporated.
- Willing to take an interest.

### Exclusion Criteria

- Crossed either limit of the age range.
- University students who don't possess an advanced mobile phone and were not university students.

- Those members with a previous history of ongoing mental ailment were rejected from our investigation. [20]

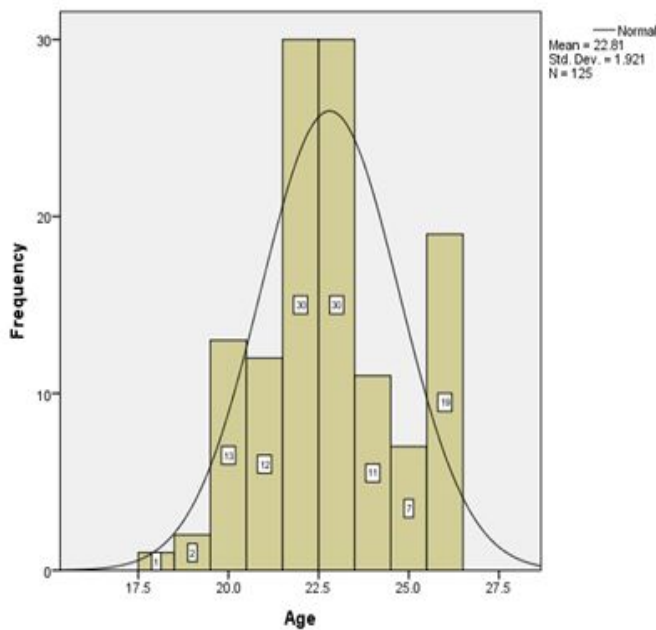
**Data Collection Tool:** Information was gathered through survey comprising of two segments including demographic data and Smartphone Addiction Proneness Scale.

**Data Collection Procedure:** The survey was given to the university students of government and private areas subsequent to taking their assent. Information was gathered online through Google structure. The survey comprises of two segments including demographic data and Smartphone Addiction Proneness Scale.

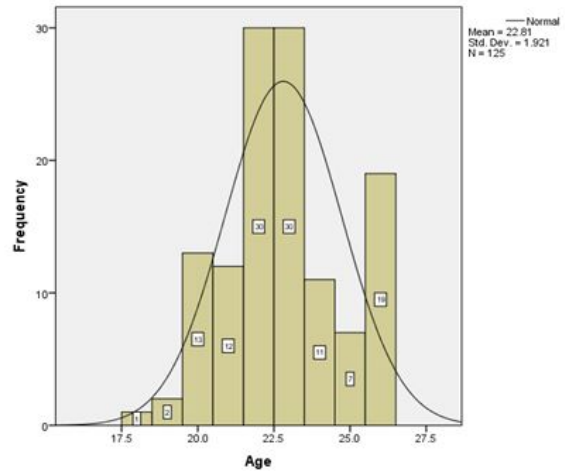
**Data Analysis:** The information was broken down by utilizing SPSS 23 statistical programming. Mean and standard deviation had been utilized to introduce the socio-geographic information. Pie chart, bar diagram and histogram had been utilized to introduce the information in graphical structure.

## Results

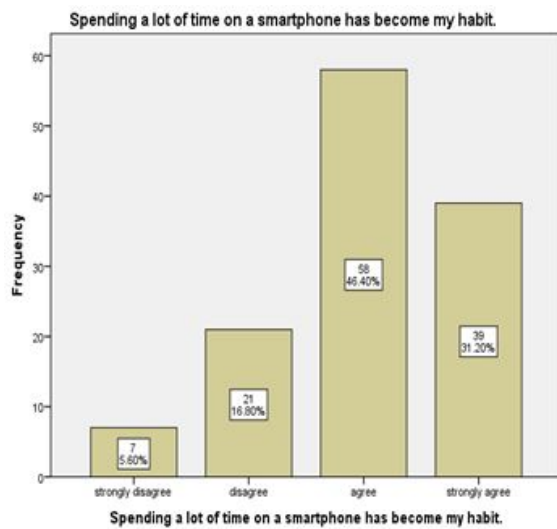
Number of participants who encountered the inclusion conditions were register for example N=125. Rao software was used to confirm the findings for all 125 participants. Analysis of the addiction with mobile phone usage was evaluated. The average age of students was  $22.81 \pm 1.921$  years (Figure1). The percentage for agree in (Table 1) where students cannot imagine their life without smartphone was 50.4% which shows increase smartphone addiction among university students during covid-19. The percentage for agree in (Table 2) where Students who tried to reduce their time on smartphones but failed was 45.6% also shows increase smartphone addiction among university students.



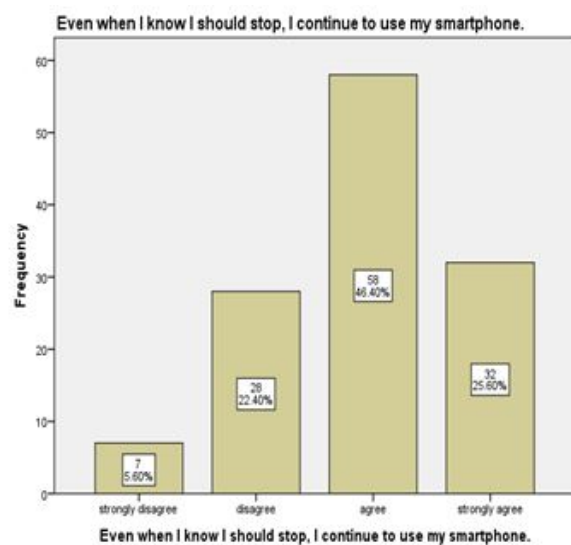
**Figure 1:** Shows Histogram of Frequency of the mean Age of 22.81. The standard deviation was 1.921.



**Figure 2:** Pie chart: gender of the participants.



**Figure 3:** Spending a lot of time on smartphone has become my habit.



**Figure 4:** Even when I know I should stop, I continue to use my smartphone.

**Table 1: Cannot imagine life without smartphone**

|                      | Frequency | Percent | Valid Percent | Cumulative percent |
|----------------------|-----------|---------|---------------|--------------------|
| Valid strongly agree | 8         | 6.4     | 6.4           | 6.4                |
| Disagree             | 12        | 9.6     | 9.6           | 16.0               |
| Agree                | 63        | 50.4    | 50.4          | 66.4               |
| Strongly agree       | 42        | 33.6    | 33.6          | 100.0              |
| Total                | 125       | 100.0   | 100.0         |                    |

**Table 2: Tried to reduce time on smartphones but failed**

|                      | Frequency | Percent | Valid percent | Cumulative percent |
|----------------------|-----------|---------|---------------|--------------------|
| Valid strongly agree | 8         | 6.4     | 6.4           | 6.4                |
| Disagree             | 22        | 17.6    | 17.6          | 24.0               |
| Agree                | 57        | 45.6    | 45.6          | 69.6               |
| Strongly agree       | 38        | 30.4    | 30.4          | 100.0              |
| Total                | 125       | 100.0   | 100.0         |                    |

**Table 3: Hard time doing what I have planned**

|                      | Frequency | Percent | Valid percent | Cumulative percent |
|----------------------|-----------|---------|---------------|--------------------|
| Valid strongly agree | 12        | 9.6     | 9.6           | 9.6                |
| Disagree             | 26        | 20.8    | 20.8          | 30.4               |
| Agree                | 50        | 40.0    | 40.0          | 70.4               |
| Strongly agree       | 37        | 29.6    | 29.6          | 100.0              |
| Total                | 125       | 100.0   | 100.0         |                    |

## Discussion

This investigation was directed to discover the commonness of cell phone compulsion among university students. 50.45% of the examination populace can't envision the existence without cell phones. The predominance of investing a ton of energy in cell phones in this populace was 46.40%. The current further shows that 45.6% populace attempted to decrease time spent on cell phone use yet failed. The habit of cell phones results in 40% of the populace incapable to figure out an ideal opportunity for the work they have arranged.

A few examinations have announced variable outcomes in regards to cell phone dependence in the populaces of Switzerland (16.9%), 17 Tunis (31.7%), 18 Korea (16%), 19 India (37%), 8 Iran (9.3%), 12 and Belarus (10%). [20] The distinction in our outcomes when contrasted with different investigations could be because of various example sizes, diverse populace attributes.

A new report by announced that Japanese teenagers who utilized a cell phone for 5 hours or more each day experienced sleep deprivation. Also, study members who had unreasonable utilization of a cell phone for communication and online talks displayed more elevated levels of despondency than members utilizing the telephones for messing around, seeing recordings, or looking through the web.

A Turkish report revealed that among university students, cell phone habit was more common in the individuals who previously utilized cell phones at a more youthful age, those with a Sort A character, those with a low monetary status, and the individuals who utilized a cell phone for over five hours per day. They likewise revealed more rest aggravations related with undeniable degrees of cell phone enslavement. [13]

An Arabian study announced that university students in Saudi Arabia are in danger of dependence on cell phones; a marvel that is related with adverse consequences on the rest, levels of energy, dietary patterns, weight, exercise, and scholarly execution. [15]

The connection between cell phone use at a youthful age and cell phone compulsion was likewise revealed by another investigation that furthermore demonstrated tension and discouragement to be indicators of cell phone habit. [13]

Our outcomes are not like different investigations since we explored in Coronavirus. In this period cell phone use was extremely high and particularly university students were dependent since all their examination material was on the web. [14]

Our study is similar to others in the fact that smartphone addiction is increased because students prefer smartphones over computers and laptop.

## Conclusion

It was finished up from above outcomes that cell phone habit was high among university students during covid-19 since members in this study can't decrease their time spend on cell phone. Investing a great deal of energy in cell phone make them unfit to take care of their job on schedule.

## References

1. Cha SS, Seo BK. Smartphone use and smartphone addiction in middle school students in Korea: Prevalence, social networking service, and game use. *Health psychology open*. 2018; 5:046.
2. Alhazmi AA, Alzahrani SH, Baig M, Salawati EM, Alkatheri A. Prevalence and factors associated with smartphone addiction among medical students at King Abdulaziz University, Jeddah. *Pak J Med Sci*. 2018;34:984-988.
3. Kwon M, Kim DJ, Cho H, Yang S. The smartphone addiction scale: development and validation of a short version for adolescents. *PLoS One*. 2013;8: e83558.
4. AlBoali R, ALkhateeb AF, Alharbi W, Saleh OJ. Prevalence of Smartphone Addiction among University Students in Saudi Arabia: A Multicenter Study. 2020;6:10-5.
5. Aljomaa SS, Qudah MF, Albursan IS, Bakhiet SF, Abduljabbar AS. Smartphone addiction among university students in the light of some variables. *Computers in Human Behavior*. 2016;1:61155-61164.
6. Nasser NS, Loh JL, Rashid AA, Sharifat H, Ahmad U, Ibrahim B, et al. A Cross-Sectional Survey on Smartphone Usage Pattern, the Level of Mobile Phone Dependence and Psychosocial Effects among Undergraduate Students in a Malaysian University. 2020.
7. Van Velthoven MH, Powell J, Powell G. Problematic smartphone use: Digital approaches to an emerging public health problem. SAGE Publications Sage UK: London, England; 2018.
8. Demirci K, Akgonul M, Akpinar A. Relationship of smartphone use severity with sleep quality, depression, and anxiety in university students. *J Behav Addict*. 2015;4:85-92.
9. Alhassan AA, Alqadhib EM, Taha NW. The relationship between addiction to smartphone usage and depression among adults: a cross sectional study. *BMC Psychiatry*. 2018; 18: 148.
10. Jafari H, Aghaei A. The relationship between addiction to mobile phone and sense of loneliness among students of medical sciences in Kermanshah, Iran. *BMC research notes*. 2019;12:1-5.
11. Elhai JD, Yang H, McKay D, Asmundson GJ. COVID-19 anxiety symptoms associated with problematic smartphone use severity in Chinese adults. *J Affect Disord*. 2020.
12. Alosaimi FD, Alyahya H, Alshahwan H, Al Mahijari N, Shaik SA. Smartphone addiction among university students in Riyadh, Saudi Arabia. *Saudi Med J*. 2016;37:675.
13. Al-Barashdi HS, Bouazza A, Jabur NH. Smartphone addiction among university undergraduates: a literature review. *J Sci Res*. 2015:21025.
14. Kumar VA, Chandrasekaran V, Brahadeeswari H. Prevalence of smartphone addiction and its effects on sleep quality: A cross-sectional study among medical students. *Ind Psychiatry J*. 2019;28:82-85.