

# Smartphone Overuse from Iranian University Students' Perspective: A Qualitative Study

Mandana Amiri<sup>1</sup>, Behnaz Dowran<sup>1</sup>

## Original Article

### Abstract

**Background:** Smartphone usage has increasing during recent years. Since its excessive use can have negative consequences, it is important to know how users use it and become dependent on it. This study was aimed at exploring how university students use their phones, how they depend on them, and the possible consequences of overusing them.

**Methods:** This study was conducted using a qualitative design and with a thematic analysis method. Data were collected using 3 focus group discussions regarding experiences of using smartphones among 22 smartphone owners who reported smartphone overuse. They were chosen through snowball sampling at a University of Medical Sciences in Tehran (Iran).

**Findings:** Based on the analysis, the 3 categories of process usage (sub-categories: doing daily routines, information seeking, to take a picture or video, entertainment, academic work, making money, to escape real-life, and passing the time), social usage (sub-categories: relationship with family, relationship with friends, interact with the opposite gender, to be seen and heard, approval seeking, and free expression), and disadvantages (sub-categories: interference with other essential activities, decreased face-to-face communications, overdependence, automatic use, loss of sense of time, stress, fatigue, sleep disturbances, physical inactivity, eye problems, high bills, and distraction) were developed.

**Conclusion:** In this research, participants mentioned various uses of their smartphones that enable them to meet their personal needs and, in spite of the negative consequences of its overuse, cause them to continue to use it. Some uses seem to be affected by environmental and cultural conditions.

**Keyword:** Smartphone; Qualitative research; Focus groups; Iran; Overuse

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1- Behavioral Sciences Research Center, Life Style Institute AND Department of Clinical Psychology, School of Medicine, Baqiyatallah University of Medical Sciences, Tehran, Iran

Correspondence to: Behnaz Dowran; Behavioral Sciences Research Center, Life Style Institute AND Department of Clinical Psychology, School of Medicine, Baqiyatallah University of Medical Sciences, Tehran, Iran; Email: [dowranb@bmsu.ac.ir](mailto:dowranb@bmsu.ac.ir)

## Introduction

Over the last decade, the new generation of mobile phones, smartphones, have provided numerous services and facilities to the extent that they have upgraded from simple communication tools to multipurpose devices. The extensive capabilities of smartphones can engage people for hours and even lead to problematic use or addiction. Since the use of smartphones can have various consequences, it is necessary to understand how people use their phones and how they get involved.

Many researches have studied the negative consequences of smartphones. Overuse or addiction is the most well-known example of these consequences, which can lead to problems such as sleep disorder,<sup>1-3</sup> reduced academic performance,<sup>4</sup> or stress.<sup>3</sup> Several studies have tried to identify predictive factors in the problematic use of mobile phones such as personality traits,<sup>5-7</sup> impulsivity,<sup>8</sup> depression,<sup>6,9,10</sup> and smartphone usage types.<sup>11</sup> Types of smartphone usage have been classified into process usage and social usage.<sup>11</sup> Process usage includes content-based consumption of media (such as viewing movies and browsing news websites) and social usage involves interacting with one's social network through social media interaction and instant messaging.<sup>12</sup> The study by van Deursen et al showed that the process related to smartphone usage is a strong factor in developing addictive behavior. People who considerably use their devices for social purposes develop smartphone habits faster, which might lead to addictive smartphone behavior.<sup>11</sup>

A majority of previous studies in this regard are quantitative researches and although they are useful in showing relationships and associations between variables, the reason and nature of the interrelation between smartphones and their users could not be inferred from them. Understanding users' perceptions and how they use their smartphones may provide insights into how smartphone usage is experienced on an individual level. User smartphone usage can help us understand its advantageous or problematic aspects.

Some studies have tried to answer these questions using qualitative methods.<sup>13-16</sup> Al-Barashdi and Jabur found that there are 2 main reasons for students' smartphone addiction, one is related to smartphone manufacturers and the other is related to students themselves.<sup>13</sup> The reasons related to students include entertainment and

escaping academic pressure, the need for certain smartphone functions and applications in order to perform their academic tasks, self-expression, particularly through social networks (SNs), a sense of superiority through working with new devices and applications before others, and preserving and developing of social relationships via SNs.<sup>13</sup> According to another qualitative study, the uses of the smartphone can be categorized as recreational, functional, interactional/connection, and informational.<sup>14</sup> Searching for information, handling affairs, and easy and cheap mean for communication lead to an easy life. Moreover, entertainment in a variety of ways helps to pass the time.<sup>15</sup> Participants used smartphones on many occasions in their everyday life in ways that could not be tagged necessarily as problematic. However, daily smartphone usage could lead to wasting of time and cause habitual behaviors.<sup>16</sup>

Although these studies offer insights into this topic, they are very few of them. Considering the rapid evolutions in cell phone technologies, changes in use patterns, and possible cultural differences in use patterns and users' perceptions, more and newer qualitative studies are necessary. Intercultural differences have not been sufficiently studied to date, although some studies have noted greater cell-phone addiction prevalence in Middle Eastern (Iran) and East Asian populations.<sup>17</sup> According to published statistics, the number of Iranian mobile phone users is over 58 million,<sup>18</sup> and 69% of them have a smartphone.<sup>19</sup>

The present research was aimed at investigating perspectives about smartphones and the way they are connected to their users in a population of university students' in Iran.

## Methods

In order to extract perceptions and experiences of smartphone use, a qualitative approach was used. We conducted 3 focus groups with 22 smartphone owners who overused their smartphone to gain insights into how, when, and why they used their devices and the possible consequences of overusing them.

**Participants:** The study participants consisted of 22 individuals who owned smartphones and overused them (according to self-report). They were recruited via snowball sampling at a University of Medical Sciences in Tehran (Iran). All participants were university students. The participants (9 women and 13 men) had an

average age of  $20.95 \pm 1.36$  years. The average age at which participants owned their first mobile phone was  $14.30 \pm 2.42$  years. Their current phone brands were, respectively, Samsung ( $n = 10$ ), Huawei ( $n = 5$ ), HTC ( $n = 2$ ), GLX ( $n = 2$ ), Nokia ( $n = 1$ ), Sony ( $n = 1$ ), and Apple ( $n = 1$ ). The first group consisted of 2 women and 5 men, the second group consisted of 4 women and 3 men, and the third group included 3 women and 5 men. At the time of data collection, all of the participants owned a smartphone.

**Materials and process:** Meetings were held in a classroom on the university campus. The classroom chairs were arranged to make a circle so that participants were facing each other. Prior to beginning the focus group discussions, information sheets explaining the nature of the study were distributed and participants declared their informed consent to participate in the study. Furthermore, another form was distributed to collect data about the backgrounds of participants (including their sex, age, age at which they owned their first phone, and their current phone brand). All of the participants agreed to protect each other's anonymity and to keep the discussed subjects confidential. The researcher informed participants that all opinions were valid and respectable even if they did not agree with them and asked them to talk one at a time in an explicit and brief manner. The focus group topic guide included a number of open-ended questions about their experiences of using their smartphones, how and when they used them, their favorite features, their perception of their relationship with their smartphones, and possible consequences of overusing them. The topic guide included items such as "Talk a little about your smartphone.", and "How and when do you use your smartphone?", and other questions were asked based on the focus group conditions.

The focus groups were all held in the fall of 2017 by the first author. The discussion lasted 90 minutes in the first group (7 participants), 80 minutes in second group (7 participants), and 105 minutes in third group (8 participants). Discussions were recorded on a recording instrument and transcribed verbatim. Sessions were terminated when the participants had discussed every question based on the topic guide as well as the related topics that were raised during the sessions. After the 3 focus groups' sessions were held, the researchers decided that further sessions were not required because no

new information, perspectives, and explanations were discovered in data analysis and saturation had been achieved.

The analysis of transcriptions was conducted manually by following the process recommended by Pietkiewicz and Smith<sup>20</sup> including immersion in the data through listening to audio recordings, multiple readings, and making notes, transformation of notes into emergent themes, seeking of relationships, and clustering of themes. In order to increase reliability and strengthen the study, the themes developed by the primary coder were checked by another member of the research team and refined after the discussion.

Several techniques were employed in order to establish and ensure trustworthiness and validity of data analysis and interpretation to achieve better methodological rigor, including constant comparison and peer debriefing. The authors returned to the data several times during the analysis to verify and develop theme and clusters (constant comparison). The emergent theme and clusters were discussed continuously between the lead author and the co-author (peer-debriefing). To avoid researcher bias, the researcher continually reflected to prevent preconceived biases from influencing her understanding of participants' descriptions.

## Results

As a result of the analysis of questions and transcriptions, a number of categories and subcategories were identified from participant accounts that are presented in the table 1.

### Type of smartphone usage

In all 3 focus groups, participants mentioned various usages of their smartphones that according to preexisting concepts can be categorized as social and process usage.

### Process usages

Participants explained that they perform their daily routines, search for information (e.g., web surfing and browsing the news), take pictures or videos, entertain themselves (e.g., listening to music), do academic work, make money, escape from real life, and pass the time through their smartphones. Some of these uses (doing daily routines, searching for information, taking photos and videos, and listening to music) seemed so common and obvious to the participants that they referred to them in short as everyone acknowledged them and no further explanations were required.

**Table 1.** Categories and subcategories

Categories	Process usage	Social usage	Disadvantages
Subcategories	Doing daily routines	Relationship with family	Interference with other essential activities
	Information seeking	Relationship with friends	Decreased face-to-face communications
	To take a picture or video	Interaction with the opposite gender	Overdependence
	Entertainment	To be seen and heard	Automatic use
	Academic work	Approval seeking	Loss of sense of time
	Making money	Free expression	Stress
	To escape from real life		Fatigue
	Passing the time		Sleep disturbances
			Physical Inactivity
			Eye problems
			Distraction
			High bills

**Academic work:** According to students, the use of smartphones to do academic work is a common practice, and thus, inevitable. "Modern science and new teaching methods necessitate having a smartphone" (participant 1, Focus group 1).

"The academic research, science databases, and articles we study, and the lecture notes, and voice recordings that we share on telegram with our classmates cannot just be neglected" (participant 4, Focus group 2).

Another participant in focus group 3 compared his current condition to when he was younger and said: "when I went to school, I could not record the teacher's voice, read pdf files via my phone, or take photos of the notes on the board; all of these are the options that I did not have then, but now I do" (participant 2, Focus group 3).

**Making money:** Another function that some participants pointed out is making money using smartphones.

"Someone said to me: "now that you are spending so much time on telegram, create a channel". He then introduced me to a guy who had gained a lot of channel members within 2 years and had made some money. He suggested this to me... I tried it and I got members very well" (participant 3, Focus group 1).

**To escape from real life and pass the time:** In addition to the main uses of smartphones, 2 other common uses of smartphones are that they are ways to escape from real life and to pass the time. When the conditions of the environment and real life are undesirable or annoying, smartphones can be the answer. Student dormitory conditions, girls' limitations, limited facilities, annoying

environments, and demotivation are among the things that lead students to use smartphones.

"When you live in the dormitory, sometimes you have to live with 12 other people. The situation is not ideal for relaxing or studying. The only way left for you is working with a cell phone to help you pass the time and not become aggressive" (participant 7, Focus group 1).

"Men sometimes use the sport facilities beside their dormitory, go out to take a walk, or go to the cinema. I am not saying that women are completely limited, but men have more freedom and, even if they stayed out till after midnight, no one would ask them where they had been" (participant 7, Focus group 1).

"See, we really do not have any other type of entertainment. Before smartphones we used to think, study, and watch TV. I used to have alternatives, but now I have nothing else to do" (participant 1, Focus group 2).

"Smartphones are very attractive, but how about my environment? What do I have as a university student? If there were other types of entertainments, I would choose them. But our university does not provide any" (participant 5, Focus group 3).

"My mom says: "you are on your cell phone all the time". I say: "what should I do? You tell me something and I will do that"; but there is nothing else to do" (participant 1, Focus group 2).

"In family gatherings, people talk nonsense. So I prefer to spend time on my cell phone, because I am not really interested" (participant 1, Focus group 2).

"Some teachers' teaching methods are boring and you have to entertain yourself with your cell

phone. This happens to me a lot and the best way to pass the time is with a smartphone" (participant 6, Focus group 1).

"I do not have any motivation to study and continue my education, because I have a scholarship and I have job security. So why should I study? I prefer to entertain myself with a cell phone" (participant 2, Focus group 3).

"Maybe one reason is that we have lost motivation. We just want to pass the time." (participant 3, Focus group 2).

"Nowadays, your time could be wasted in a lot of ways, like when you are walking or stuck in traffic, and so on. We fill these gaps with our cell phones" (participant 7, Focus group 1).

### **Social usage**

Another use of the smartphone is social use. Most of this social use is via Telegram, Instagram, and WhatsApp. Participants use these social networks to connect with family, friends, and the opposite gender.

"I used to be against Telegram groups and such things. I had totally banned them, but then I saw they are really necessary. Now, I use it more as a communication tool" (participant 7, Focus group 1).

"I'm more interested in communication channels on Telegram. I use WhatsApp for making video calls with my family" (participant 6, Focus group 1).

"Sometimes you get bored and you can say a lot of things to your friends and family who live apart from you through writing; which is much easier than speaking" (participant 3, Focus group 1).

"Casual relationships between girls and boys are not common in our university, so they are experienced in cyberspace [cell phone]" (participant 6, Focus group 1).

"Telegram groups consisting of both girls and boys are more popular. People act differently in the university than they do in those groups. In the university, they are too shy, but on Telegram, they communicate so openly that you cannot believe they are the same people" (participant 5, Focus group 2).

**To be seen and heard:** In addition to communicating with others, social networks provide an opportunity to be seen and heard by other people.

"I share a lot of things on social media every day. It gives me a good feeling, like I am being heard" (participant 6, Focus group 1).

"People like to be seen in different groups. There is no opportunity at the university to show their talents, so they choose cyberspace for presenting themselves in ways they know like pictures and texts" (participant 2, Focus group 2).

**Approval seeking:** Social networking activities on social media can satisfy/fulfill one's need for approval and attention from others.

"When the number of members and follower's increases, we think it is a sign of their approval of our work, although they may really not mean that. We think that we are successful because of the number of people being attracted to us and paying attention" (participant 5, Focus group 1).

**Express freely:** Participants recognize social media as a place where they can freely express their feelings and opinions.

"I know someone in our class who is known for being religious, but in cyberspace is totally different. I mean these types of people have two faces" (participant 2, Focus group 1).

"I think having relationships is much easier. We think that, because it is a virtual world, everything is allowed there and you can do whatever you like or speak as you wish" (participant 3, Focus group 2).

### **Disadvantages**

In addition to pointing out the different advantages of smartphones, participants complained of some of the disadvantages they had discerned.

**Interference with other essential activities:** Most of the participants believed that the smartphone has become the most important thing in their lives to the point that it interferes with other essential activities.

"Sometimes my smartphone prevents me from spending time with my family or attending a class, or sometimes even doing my religious responsibilities. These are all examples of harms" (participant 4, Focus group 1).

**Decreasing face-to-face communications:** According to participants, smartphones have impacted the quantity and quality of their face-to-face interactions.

"It pushes the people who are close to us away, and brings the ones apart from us close to us. Sometimes in the dormitory my roommates ask me to put the cell phone aside and speak with them because I spend most of my time on it. The same is true about my family. We do not speak

and we spend most of our time with our cell phones" (participant 5, Focus group 3).

"When I am on my cell phone, I am completely disconnected from the real world. Most of the time, my friends call me and I literally do not hear them. Not that I deliberately ignore them, but I am not aware" (participant 1, Focus group 1).

**Overdependence:** Many of the participants acknowledged that they were heavily dependent on their phones.

"Feels like there is pressure on me. When I use my cell phone too much, my family prohibits me from using it and I get crazy" (participant 7, Focus group 1).

"Personally, if I am away from my cell phone for a day, I feel that I have nothing" (participant 6, Focus group 2).

"I feel that I am very dependent on my cell phone. Even when there are no new messages, I review the old ones" (participant 7, Focus group 3).

**Using automatically:** Most of the participants stated that they used their phone automatically as a habit.

"It is a type of an invisible attraction that pulls you to the cell phone" (participant 4, Focus Group 2).

"We are used to checking our cell phones every 5 minutes even if there is nothing new, but it is a habit" (participant 1, Focus group 2).

"Even if we are studying, we read two lines, we check [the cell phone], and then, we continue" (participant 3, Focus group 2).

**Loss of sense of time:** Participants explained that, once they start to use the smartphone, they easily lose their sense of time.

"It attracts you in a way that drowns you in that world and you may not know how many hours you have been on your phone" (participant 1, Focus group 2).

"Every night before going to bed, I definitely pick up my cell phone to check it and when I put it down, I see that 2 hours have passed just for checking" (participant 3, Focus group 2).

"The time spent on it [cell phone] gradually increases day by day. You do not feel it, but when you actually compare the hours, you see the increase" (participant 8, Focus group 3).

"You open Instagram for a 2-minute check, but there are so many other pages that popup and after some time you do not feel how much time you are wasting" (participant 8, Focus group 3).

"I once installed an application that showed

the amount of time spent on the phone. Apparently, I was spending more than 7 hours on my phone every day. I really could not believe it. I uninstalled the application; it was just making me upset" (participant 4, Focus group 1).

**Stress:** According to the participants, the time spent on the phone and being dependent on it can lead to stress.

"When I am on my phone, I even feel stressed because I am wasting my time, but at the same time, I really do not feel like studying. I want to study, but I cannot" (participant 5, Focus group 2).

"I check the groups constantly ... there might be classes or news that I am missing" (participant 5, Focus group 2).

**Fatigue:** According to some participants, despite initial pleasant feelings, the overuse of mobile phones leads to boredom.

"I think that beyond all the transient pleasure, we all have a sense of inner sadness about spending our time with these inanimate objects. Although there are real people on the other side, the relationships are not real. Maybe it makes us happy at that moment, but we have a sense of disgust in our subconscious." (participant 4, Focus group 1).

"Sometimes I use it so much that I feel overwhelmed ... I want to put it down and do something else like studying" (participant 6, Focus group 2).

"Sometimes I just get sick of it. I cannot stand it anymore" (participant 1, Focus group 2).

**Sleep disturbances:** Overuse of mobile phones can also negatively affect the quality and quantity of sleep.

"We mostly check our cell phones late at night. It makes us sleepless, and so, we stay awake till 2 or 3 A.M. In the morning, it is hard not to fall asleep during the class" (participant 2, Focus group 2).

"I'm a nursing student. The teacher asks us why we are so sleepy in the morning and we say: "we were on night shift". He asks where and we say: "on Telegram!". It is a new phrase that we use these days" (participant 2, Focus group 3).

"When we check our cell phones at night, it is not just over when we put the cell phone down. For the next 20 minutes, our minds are still engaged with all the things we have checked. Our sleep does not have its previous quality" (participant 8, Focus group 3).

**Physical inactivity:** Physical inactivity is

another consequence of excessive use of cell phones that some participants mentioned.

"We are becoming lazy. Sometimes we are sitting close to each other, but talk together through Telegram... we do not feel like typing long messages, we send voice messages to each other instead" (participant 3, Focus group 2).

"When it is time for a break during the class, we do not walk. We stay in the class and check our cell phones to see if there is anything new. The class continues and we listen, and then, there is the next class and the cycle goes on. Our rate of physical activity has reduced dramatically. I have become overweight because I prefer to sit because it is easier to check my phone this way" (participant 2, Focus group 3).

**Eye problems:** Some participants stated that prolonged use of mobile phones can cause eye problems.

"I have been faced with a problem since I use my cell phone late at nights, in the darkness. I feel that my eyes have become weak" (participant 1, Focus group 1).

"Reading electronic texts is exhausting; especially for the eyes" (participant 1, Focus group 3).

**Distraction:** Some participants mentioned that mobile phones can cause distraction.

"I think it has also caused a sort of distraction. Like you are going to do something, but you become engaged in checking your phone and you forget about what you wanted to do in the first place" (participant 5, Focus group 2).

"It is like knowing a lot of things, but your knowledge is in your cell phones, as it used to be in books, and your mind is blank" (participant 2, Focus group 3).

**High bills:** Utilizing smartphone features, especially having access to the internet, is not cost free and can cause a significant burden if used excessively.

"I am spending almost half of my salary on internet data" (participant 7, Focus group 1).

"As soon as I receive my salary, I buy internet data packages" (participant 1, Focus group 2).

"When you play games on your cell phone, you have to spend a lot of money in order to pass the levels" (participant 4, Focus group 3).

## Discussion

The multifunctional nature of smartphones has made them into so much more than merely

devices for calling or texting. In this research, participants mentioned the various uses of their smartphones that could be categorized into process usage and social usage. These categories enable users to meet their personal needs.

In line with the results of other studies, doing daily routines, searching for information, taking photos and videos, and listening to music as process usage are some of the most common and usual uses of smartphones. Some of the participants also mentioned making money via smartphones. This feature is facilitated through social networks and accessibility to a large number of audiences. For this purpose, no definite expertise, specific working hours, physical work space, and in some cases no authorization is necessarily needed that altogether provides a favorable context for making money. The key to success in this method of money-making is to spend a large amount of time and have an active presence on social networks. According to previous findings,<sup>21</sup> the amount of time spent on mobile phones is one of the predictors of the problematic use of mobile phones.

The use of mobile phones to carry out academic assignments has become an inclusive necessity. This option, as another example of process usage, has a great impact on education in every aspect. Students take advantage of their smartphones to exchange information and learn.<sup>22,23</sup> In addition to this apparent and direct effect, mobile phones can have indirect effects on participants. Compared to the interactive nature of this medium, the traditional teaching setting, in which the student is a passive consumer of educational content, is boring. Mobile phones provide a good opportunity to escape this boring setting.

Classrooms were not the only mentioned boring environment for our young study population. Many other real-life settings were described as boring or annoying by the students, and mobile phones provided them the opportunity to escape. Even merely passing the time is better with mobile phones. Fullwood et al. noted that future studies are needed to investigate the relationship between specific mobile functions (such as entertainment) and individual motivations (such as relieve boredom).<sup>14</sup> It is also necessary to take into account the playful nature of new media, including the smartphone, and their impact on the identity and behavior of the

new generation.<sup>24</sup>

Social usage is another type of mobile phone use. The primary purpose of mobile phones is communication. Easy access to the Internet and social networks on smartphones facilitates communication with friends and family, without distance being an issue. Social networks also provide the opportunity to communicate with the opposite sex, to be seen and heard, and have freedom in expressing oneself. Although environmental conditions (e.g., strict regulations, and cultural and social taboos) or individual characteristics (e.g., shyness or low communication skills) might limit the possibility of communicating with the opposite sex or expressing oneself, smartphones have provided increased opportunity for communication. This has been mentioned in other studies as "unhealthy relationship",<sup>25</sup> and "reducing social shame and prudency" under the "malfunctions of scientific-educational dimension".<sup>22</sup> While this freedom of presence and communication can be considered as an opportunity, it can also be considered as threats and harms related to context and dominant culture. This could be due to the subcultures, the generation gap and/or the media panic. Future studies will clarify its nature and related factors.

In spite of all the advantages of smartphones, they also have some consequences. It seems that the overuse of mobile phones can result in overdependence, using automatically, loss of sense of time, and interference with other essential activities. Considering Griffiths' definition of behavioral addiction which includes the 6 main components of salience, mood modification, tolerance, withdrawal symptoms, conflict, and relapse,<sup>26</sup> the participants' descriptions of their interaction with smartphones involve at least half of the signs of behavioral addiction. Moreover, James and Drennan reported a range of characteristics associated with addictive use.<sup>27</sup> Those were impulsiveness, mounting tension prior to using the device, failure of control strategies, and withdrawal symptoms.<sup>27</sup> In another study, symptoms related to mobile phone addiction were found to be prevalent among students of the University of Mauritius, between 6% and 11% of students showed addiction symptoms related to tolerance, withdrawal, displacement of attention to school or work, and the inability to

diminish use.<sup>28</sup>

Overdependence on mobile phones and its overuse caused problems like stress, fatigue, sleep disturbances, physical inactivity, eye problems, distraction, and high bills among the participants of the present research. The results of previous studies showed similar consequences.

Numerous quantitative studies have shown a significant relationship between excessive use of mobile phones and sleep disorders.<sup>29</sup> Furthermore, in other studies, fatigue,<sup>30</sup> stress,<sup>31</sup> physical inactivity,<sup>32</sup> eye problems,<sup>33</sup> distraction,<sup>34</sup> and high bills<sup>35,36</sup> were reported as results of excessive use of mobile phones.

According to participants, spending a great amount of time on mobile phones reduced their face-to-face communications. Other research findings also indicate the negative impact of technology, including mobile phones, on the quantity and quality of face-to-face communication.<sup>37,38</sup> People with a high level of loneliness tend to rely more on smartphone-mediated communication and are unwilling to engage in face-to-face interactions.<sup>39</sup> Other predictors of less willingness to partake in face-to-face interactions need future studies. The consequences of reducing face-to-face interactions should also be investigated.

## Conclusion

Generally, the findings of this study provide an inclusive report of smartphone usage from university students' point of view. They also provide new challenges about the characteristics of the digital generation as well as possible cultural differences for future research.

**Limitations:** This study had some limitations. It focused on smartphone owners who were all students at a University of Medical Sciences in Tehran (Iran) and the conclusions from this research cannot necessarily be generalized to other situations and populations. Therefore, further research is needed to explore this subject in different environments (e.g., different cultures and age groups) using similar and supplementary methods (e.g., interviews) to gather individual accounts, and thus, remove the potential for groupthink.

## Conflict of Interests

The authors have no conflict of interest.



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## Authors' Contribution

Both authors contributed to all steps in the preparation of this article.

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## استفاده مفرط از تلفن هوشمند از دیدگاه دانشجویان ایرانی: یک مطالعه کیفی

ماندانا امیری<sup>1</sup>، بهناز دوران<sup>1</sup>

### مقاله پژوهشی

### چکیده

**مقدمه:** استفاده از تلفن هوشمند طی سال‌های اخیر رو به افزایش می‌باشد. از آن‌جا که استفاده افراطی از این وسیله می‌تواند تبعات منفی به دنبال داشته باشد، دانستن چگونگی استفاده کاربران و وابستگی به آن اهمیت دارد. پژوهش حاضر با هدف بررسی چگونگی استفاده دانشجویان از تلفن‌های همراه خود، چگونگی وابستگی به آن و پیامدهای احتمالی استفاده مفرط انجام شد.

**روش‌ها:** این مطالعه به روش کیفی صورت گرفت. داده‌ها با استفاده از سه جلسه بحث گروهی متمرکز پیرامون تجربیات استفاده از تلفن هوشمند با ۲۲ دانشجو که استفاده بیش از حد از تلفن همراه خود داشتند، جمع‌آوری گردید. شرکت‌کنندگان به روش نمونه‌برداری گلوله برفی از یکی از دانشگاه‌های علوم پزشکی شهر تهران انتخاب شدند.

**یافته‌ها:** سه طبقه استفاده فرایندی (با زیرطبقات انجام کارهای روزمره، جستجوی اطلاعات، گرفتن عکس یا فیلم، سرگرمی، کارهای دانشگاهی، کسب درآمد، فرار از زندگی واقعی و گذران وقت)، استفاده اجتماعی (با زیرطبقات رابطه با خانواده، رابطه با دوستان، تعامل با جنس مخالف، دیده شدن و شنیده شدن، تأییدطلبی و بیان آزادانه) و تبعات (با زیرطبقات تداخل با سایر فعالیت‌های ضروری، کاهش ارتباطات چهره به چهره، وابستگی مفرط، استفاده به صورت خودکار، از دست دادن حس زمان، استرس، خستگی، اختلال در خواب، عدم تحرک بدنی، مشکلات چشم و حواس پرتی) و افزایش صورت حساب استخراج گردید.

**نتیجه‌گیری:** در تحقیق حاضر، شرکت‌کنندگان استفاده‌های مختلفی از تلفن‌های هوشمند خود را ذکر کردند که آن‌ها را قادر می‌سازد نیازهای شخصی خود را برآورده سازند. تعامل افراد با تلفن‌های هوشمند به گونه‌ای است که با وجود پیامدهای منفی استفاده مفرط، همچنان به استفاده از آن ادامه می‌دهند. به نظر می‌رسد برخی از کاربردها تحت تأثیر شرایط محیطی و فرهنگی است.

**واژگان کلیدی:** تلفن هوشمند؛ پژوهش کیفی؛ گروه‌های متمرکز؛ ایران؛ استفاده مفرط

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۱- مرکز تحقیقات علوم رفتاری، انستیتو سبک زندگی و گروه روانشناسی بالینی، دانشکده پزشکی، دانشگاه علوم پزشکی بقیه‌اله (عج)، تهران، ایران

نویسنده مسؤول: بهناز دوران؛ مرکز تحقیقات علوم رفتاری، انستیتو سبک زندگی و گروه روانشناسی بالینی، دانشکده پزشکی، دانشگاه علوم پزشکی بقیه‌اله (عج)، تهران، ایران

Email: [dowranb@bmsu.ac.ir](mailto:dowranb@bmsu.ac.ir)