Fear of missing out, Fear of positive and negative evaluation, Problematic smart phone usages and Smart phone addiction among University Students

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CERTIFICATE

It is certified that M.Sc. Research Report on **Fear of missing out, Fear of positive and negative evaluation, and Problematic smart phone Usages and smart phone addiction among university students** by Itrat Fatima has been approved for submission to Quaid-i-Azam University, Islamabad**.**

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Dr. Saira khan

Supervisor

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Dedicated to my beloved parents and brothers

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Abstract

The present research aimed at studying the relationship between fear of missing out (FOMO), fear of positive and negative evaluation, problematic mobile phone usage and smartphone addiction among university students. Furthermore, the relationship of age, gender, education, models of mobile phones and why they used this mobile phone models was also explored with study variables. The sample (N=350) comprised of university students with age ranging from 18 to 30 years. The data was collected by using purposive and snowball sampling techniques from university students. The Fear of Missing out Scale (Przybylski et al., 2013), Fear of Positive Evaluation Scale (Week & Howell, 2012), Fear of Negatives Evaluation Scale (Leary, 1983), Problematic Usage of Mobile Phone Scale (Merlo, Stone & Bibbey, 2013), and Smart Phone Addiction Scale (Kwon, 2013) were used to assess study variables. The cronbach's alpha of the study measures ranged from .71 to .90, providing evidence for internal consistency of the study measures. Correlation analysis was carried out to explore the relationship between study variables. The results of correlation analysis indicated that there was a significant positive relationship between fear of missing out, fear of positive and negative evaluation, problematic smart phone usage and smart phone addiction among university students. Regression analysis indicated that problematic smartphone usage and fear of negative evaluation predicted smartphone addiction accounting for 68 % variance. Comparison across gender indicated that males scored higher on fear of missing out, problematic smartphone usage and smart phone addiction in comparison to females. Non-significant difference was apparent across fear of positive and negative evaluation. Significant difference across age was apparent on problematic smartphone usage where early adults scored higher in comparison to late adolescents. Significant differences across problematic mobile phone user and non-problematic mobile phone user was apparent on all study variables. Findings of present research were discussed in the light of existing literature.

INTRODUCTION

Chapter 1

Introduction

With a rapid advancement in digital technology, individuals are overly dependent on technology for day to day functioning. Though at one level, it is making life easier but at the same time it is creating problems for different segments of population. Adolescents and young adults are overly dependent on the digital technologies which are negatively affecting their social functioning and mental wellbeing. A subsequent portion of the day is spent on using different social media apps like tiktok, whatsapp, and Instagram and face book. The key question in our relationship with technology is about which party will be in control. Unconscious, compulsive smartphone usage lets technology control users.

All the digital technologies smart phone offers consumers with a universal platform can share a significant volume of digital information at a low cost. It provides a wide range of information through communication, including interaction , e-mail, chatting, data transmission, societal networking, and so on, information gathering , finding databases, reading digital books, and so on, and information dissemination, providing information to others (Stallings, 2009). Keeping the positive aspects aside it is important to consider that it is affecting young individuals negatively as well. Global statistics indicate that the number of Smartphone users is increasing all over the world. In US, Canada, Britain and Germany, more than 103 Smartphones are used by millions of individuals. Among these users, the percentage of university students having Smartphone has reached more than 87% which is an alarming situation. Smartphone addiction leads to dependency on it on the part of users and they face problems connected to it (Hawi & Samaha, 2017). More than 69% of the students in throughout the world have been reported to be suffering from negative effect of Smartphone addiction (Szpakow, Stryzhak, & Prokopowicz, 2011). According to the survey, 70% of males and 30% of females use Facebook, 81 percent of the individuals use mobile for study and other purposes, 65 percent of the population uses mobile phones for contact purposes, and 30% of respondents said they use the internet for other purposes (Haque, 2013). Smart phone addiction is on the rise among the younger population, and there is little data on the prevalence of internet and mobile addiction in Pakistan, particularly among the youth. Excessive

smartphone use was shown to be common among those aged 22 years and, more specifically, females were found to be more hooked to smartphones than males (Zahid, 2021).

Excessive smartphone use, on the other hand, is currently an issue for many people. The number of adolescent smartphone users (15–24 years) in the US, Canada, Britain, Germany and Italy reached 103 million. (International Telecommunication Union (ITU, 2004). Klyoko and Hitoml (2005) found that 49% of high school students owned smartphones that they use more than 10 times a day to establish friendships and check email. Nighttime smartphone use resulted in their getting up late and those students report they cannot live without smartphones. In another study conducted in the US, 65% of the participants reported that they could not live without smartphones (Wajcman, Bittman, Jones, Johnstone, & Brown, 2007). 68.8% of Belarusian university students were convinced on the harmful effects of mobile phone (Szpakow et al., 2011).

With reference to Pakistan, the situation is also alarming. One of the most alarming consequences of its usage and addiction is the prevalence of it among teenagers and students. (Aljomaa, Qudah, & Abduljabbar, 2016). There is an increasing trend of smart phone usage among Pakistani youth. However, little is known about the effects of this alarming problem on students' academic life. The impact of smart phone addiction on university students in Pakistan. This shows that Smartphone addiction is a general phenomenon worldwide, including Pakistan. Smartphones are becoming increasingly popular day by day among students worldwide (Gokcearslan, Mumcu, Haulaman, & Vaevik, 2016). Some users have become so much attracted towards its use that they feel incomplete without its use. It offers ample opportunities to students for creating connections through social media (Boumosleh & Jaalouk, 2017). The most commonly accessed networks are WhatsApp, Facebook, Twitter and Instagram. Smartphone provided facilities regarding SMSs and mail through internet navigation. It includes Cam, video, Bluetooth, multimedia, radio, YouTube, movies, VPN, GPS and many more applications (Pearson & Hussain, 2017). Smartphone provides easier access to online mails, fast messages as well as usage of office applications which can be downloaded from different sites online. It is also used for sending emails (Samaha & Hawi, 2016). Hence, all age groups take much interest in the Smartphone due to its multiple benefits. It has literally replaced computers due to which people are increasingly

using it worldwide for different purposes and services (Lam, Peng, Mai, & Jing, 2009). It is also accepted to be the most popular source of entertainment, amusement and pastimes. Recent studies have cautioned about its negative effects on students' study and development. This phenomenon has received less attention among education researchers in Pakistan especially in the domain of higher education. An alarming picture of the young generation's adverse effects encompassing all domains, such as social, psychological, physical, and educational effects (Al-Barashdi & Jabur, 2016). around 72% masses use Smartphone, 68% of which are android users in Pakistan, from which the top leading users aged between 21-30.

Pakistani data, In view of socio-cultural trend this is a direct offshoot of new technological culture. Cognitivists attribute the Smartphone addiction to the distorting idea and schemas. This shows that the use of Smartphone among people is the result of different social, cultural and emotional factors (Masood, Luqman, & Ali, 2018) the overuse of Smartphone may put negative effects on their study. It may also affect the mental health of students, wellbeing or happiness (Javid, Malik, & Gujjar, 2011). Gezgin, Cakir, and Yildirim (2018) have also indicated that students take Smartphone as a source of entertainment and this later becomes a permanent habit. The students are the most frequently reported addicts of Smartphone and communication technology. They also possess Smartphone more than other groups in the society. The low-priced smartphones in the markets have further attracted larger number of students towards its purchase and applications (Aljomaa, Qudah, Albuesan, Bakhiet, & Abduljabbar, 2016). Pakistan Demographic and Health Survey (PDHS) estimated extensive ownership of cell phones in Pakistan with 94.7% in the urban population. Pakistan Advertiser Company reported 77 % of cell phone users aged between 21-30 years. around 72% masses use Smartphone, 68% of which are android users in Pakistan, from which the top leading users aged between 21-30, which constitutes around 77% of the total population, followed by 12% between age 31-40, 9% between age 10-20 and the least user approximately 1%are above the age of 41.

Problematic smartphone use (PSU) is a term used to describe excessive smartphone use that interferes with job, school, or social activities (Billieux, Maurage, Lopez-Fernandez, Kuss, & Griffiths, 2015). Smartphones have become an indispensable part of the daily lives of adolescents in the 21st century, which is characterized by a highly digitized modern world. Besides their many advantages,

smartphones might pave the way to compulsive usage and addictive experiences. With more than 3.1 billion worldwide users as of 2019, which are expected to reach 3.8 billion by 2021 (Ericsson, 2017). Smartphones have permanently changed our daily routines. They have become the de facto means for communication, socialization and access to information; and hence become inseparable in our lives (Cheever, Rosen, Carrier, & Chavez, 2014). When separated, individuals may encounter the following incidents: physiological withdrawal-like symptoms(Clayton, Leshner, & Almond 2015), increased anxiety and even phantom vibration syndrome which can be described as the sensation that one's smartphone is vibrating even though there is no notification coming(Kruger & Djerf, 2016) a syndrome experienced by the majority of users(Drouin, Kaiser, & Miller, 2012). Problematic smartphone use, which is also interchangeably called as smartphone addiction or smartphone use disorder.(Park & Lee, 2012) can be defined as the overuse of smartphones in a manner that is difficult to control and has harmful effects on the other areas of life. (Adnan & Ari, 2020). As devices are being carried around all the time, (Oulasvirta, Dayama, Shiripour, John, & Karrenbauer, 2020). Distinguish smartphone usage behavior as a series of _short duration, isolated, reward-based' (SIRB) sessions as opposed to other technological devices like tablets and laptops. In this sense, informational rewards reinforce the checking behavior ultimately, performing it out of habit. As smartphones give access to a broad variety of sources for seeking information, socializing and entertainment, the overall reward value of ―checking" habits increases as well.

The Hook model was developed by (Fogg & Eyal, 2020) is based on reinforcement theory in the formation of habitual behavior, which can be traced back to reinforcement experiments. To make the desired behavior habitual, the Hook model recommends a four-step loop. The trigger is the first step, and it refers to an external or internal stimulus that instructs the user on what to do next and how to act. The second step, action, refers to the actions of the user based on the information provided by the stimulus. The third stage, namely reward, refers to the acquisition of a variable reward as a consequence of the actions mentioned above. The last step, investment, means having the users makes a deliberate effort to invest in the platform as in the form of time, effort, social capital investment to increase the likelihood of the repetitive behavior

A common Instagram usage habit can be used to illustrate the Hook model. An external trigger, a notification message, kicks off the sequence. The model is designed to start with an external trigger and progress to an internal one. Internal triggers are mental and emotional states. The emotion should be vague and negative, such as loneliness, boredom, or uncertainty, in order for the activity to become habitual. Vague emotions allow the desired behavior to become a habit by avoiding reaching the consciousness level while negative emotions cause the individual to take action more easily. In Instagram application, this investment is the number of followers and the photo archive accumulated so far. The more investment is made in the platform, the more addictive it becomes. The system aims to replace the external trigger with the internal trigger in the long term. In Instagram application, the internal trigger is the desire not to miss the opportunity to capture a photo of the moment (Alter, 2017).

Snap Streaks, a Snapchat feature, could be viewed as a deceptive example of a hook approach. As a badge, this feature displays the number of days a user has messaged his or her respective friend. Adolescents consider it as a sign of how good their relationships with their contemporaries are, and they don't want to break the streak. They supplied their login credentials to one of their close friends and asked them to send dummy messages to their stated pals while they were offline for a period of time (during a holiday with their family, etc.) so that their snap streaks would not be broken.(Environ, 2020).

Whatsap was found to be the most frequently installed mobile app; almost all the responding adolescents (50.9%) use it. Instagram (15.7%) was found to be the second mostly used app among the adolescents. Social applications as Facebook and Twitter. The reports indicated that the rate of use for Facebook (14.6%) and Twitter (11.1%) is considerably low. Since most of the participants do not use these applications.

Many studies that indicated male addiction is higher than females (Frangos, Fragkos, & Kiohos, 2010). These studies attribute males' higher tendency for mobile addiction to females' being more likely to engage in interpersonal communication and social relationships via their mobile phone (Hong, Chiu, & Lin, 2012). Demirci, Akgonul and Akpinar (2014) reported that male had 2.7 more risk at smartphone addiction than female. When men attempt abstinence, they experience more worry and tension than females. For starters, reducing problematic smartphone use in females may be less distressing than in males. Furthermore, female tend to strengthen

their friendships, which keeps them on their smartphones and allows them to receive more emotional support, whereas boys seek to use smartphones to strengthen their social relationships, which keeps them on their phones and allows them to receive more emotional support. (Lee, Kim, & Choi, 2017). How to build social relationship without the use of smartphones might have reduced boys' problematic smartphone use more than the girls. Female define smartphones as central component of their personal existence which could bring more resistance to reduce their smartphone use. (Hogle & Curtin, 2006). The trend of using smartphones among males is higher than females. Male students showed a higher percentage for Smartphone use (Mok et al., 2014). This indicates that in the current context, the trend of Smartphone use is higher among male students than female students. This trend could be attributed to the cultural influence where female access to mobile and Smartphone is restricted in many communities, and females are discouraged. Women have more tendency towards the social relationship, as a result, they spend pretty good time on using social network services such as Facebook, WhatsApp, Instagram, and other social networking which lead them eventually to get addicted to their smartphones. However, men are perceived to be more susceptible when it comes to online and offline gaming and programming than women.

Females use their mobile phones for a myriad of purposes, according to Limpcomb et al. (2005). Women used cell phones for a number of reasons, including emergencies, shopping, and leaving voice messages/memos. Women also used voice activated calling on their smartphones, according to the survey. ―Men tend to use cell phones for work (staying in touch with the office, group conferencing, keeping track of news) or for entertainment (games and sports)," (Lipscomb et al., 2005). When assessing gratifications and mobility, instrumentality, and immediacy as the predictors of use of mobile phones, occupation rather than sex seemed to be the reasons for higher mobile phone use in a study performed by (Leung & Wei, 2000). Baron and Ling (2007) found females place higher importance on using the mobile phone to make calls or send a text when they want to ―share news".

Smart phone addiction is on the rise among the younger population, and there is little data on the prevalence of internet and mobile addiction in Pakistan, particularly among the youth. Excessive smartphone use was shown to be common among those aged 22 years and, more specifically, females were found to be more

hooked to smartphones than males (Zahid, 2021). Excessive smartphone use, on the other hand, is currently an issue for many people.

With a 34 percent market share, Samsung is the most well-known brand in Pakistan, while the iPhone is used by 24 percent of smartphone users. Q-Mobile devices are used by 21% of smartphone users, putting it just ahead of Nokia, which has a 20% market share. According to the info graphic, 16 percent of smartphone users buy paid apps on a regular basis, while the rest 84 percent are satisfied with free apps.

Problematic smartphone use increasingly becomes more of a concern globally especially among young adults (Li, Niu, & Mei, 2017). Excessive use of smartphone in young adults. Bulck's (2020) study showed that the adults spend hours staying up at late night using social apps such as Facebook, Instagram, Twitter, WhatsApp, and a variety of other communication tools before falling sleep.

On WhatsApp, for example, the adolescents were instructed to avoid responding to non-urgent incoming messages in order to reduce the other party's expectation of an immediate response. Then, without using a phone, create communication norms to improve the quality of social communication. According to studies, 72 percent of adolescents feel compelled to respond to an incoming contact or message right away. This phenomenon can be attributed to the wrong interpersonal communication etiquette as well as low self-control and peer pressure. In the Internet addiction domain, find such negative but significant relation between adolescents' age and addiction level stating that this risky behavior is temporary in the adolescence period. This phenomenon is said to wear off with increased familiarity with the technology (Shek & McMurran, 2016). 81% of adults between the ages of 18 and 29 are wireless internet users. By comparison, 63% of 30-49 year olds and 34% of those ages 50 and up access the internet wirelessly (Lenhart, Purcell, Smith, & Zickuhr, 2010). Young adult smart phone users under the age of 30 do not use the internet as frequently as those aged 30 or above. Adult internet users with home broadband connections and adults who use the internet wirelessly, on the other hand, go online significantly more frequently than other internet users, regardless of age. Over the last two years, posting comments online (on a discussion group, website, blog, or photo site) has become more common among adults. People under the age of thirty are less inclined to leave online comments. (Aaron & Kathryn, 2010).

Many people in today's culture are overly reliant on their smart phone. Smart phone offer the benefit of being utilized for a variety of functions, including productivity increase, record retrieval, social engagement, rest, and entertainment (Deursen et al., 2015). Excessive smartphone use, on the other hand, is currently an issue for many people. Problematic smart phone is also accompanied with feature similar to those seen in addictive use. Problematic smart phone use (PSU) is linked to the idea of problematic smart phone usage (Kuss, Karila & Billieux, 2014). The investigation of risk factors for PSU has been aided by the discovery of connections between demographic, psychological, psychiatric, technological, and psychopathological variables (Kuss et al., 2014). Importantly, PSU differs from and poses a separate risk when compared to problematic smart phone use because to the dynamic nature and ease of use of one's smartphone.

Festinger (1954) claimed that humans have an innate desire to evaluate themselves by comparing themselves to others. The widespread use of social media and its potential to link millions of people has created an ideal atmosphere for people to compare themselves to others. Users of social networking websites can utilize a variety of services to maintain and manage their profiles, as well as upload and share photos and videos from their life. It allows them to look at the events in other people's life as well. It allows people to post a status in the form of text, photo, or video, and users can also browse statuses that have been posted by others, depending on the privacy settings.

Analyzed other factors that were fairly predicted to be connected to problematic smart phone use (PSU) despite a lack of empirical evidence. Anxiety over favorable and negative evaluations, negative affect, and the fear of missing out are all represented by these characteristics (FoMO). Unlike FoMO, which has recently been related to problematic smart phone use (PSU), PSU has been linked to fear of missing out FoMO (Elhai, Levine, Dvorak, & Hall, 2016). Our concentration is on PSU and one type of usage in particular, social use. Nonsocial smartphone use is primarily for nonsocial purposes e.g., entertainment, relaxation, whereas social smartphone use is primarily for social purposes communication, social networking (Deusen, 2015).

Fear of Missing Out (FOMO)

Fear of missing out (FoMo) as ̶a̶ pervasive apprehension that others might be having rewarding experiences from which one is absent" (DeHaan, Gladwell, Murayama & Przybylski, 2013). This chronic worry pervades an individual's life, and it is amplified by online peers' social media postings. FoMO is a widespread fear that others are having pleasant experiences while one is missing out (Przybylski et al., 2013). FoMO was linked to problematic smart phone use (PSU). According to Elhai et al. (2016) FoMO was also linked to increasing use of social smartphones (Alt, 2017; Przybylski, Murayama, DeHaan & Gladwell, 2013). People who have a higher level of FOMO are assumed to remain profoundly connected and updated to *via* a constant social media connection (Fuster, Chamarro & Oberst, 2017) to satisfy their needs and self-recognition (Franchina, Vanden & Rooij, 2018).

Students use social media platforms to form new relationships, be a part of a social group, stay informed, and fulfil their affiliation needs (Abel, Buff, & Burr, 2016). They may spend more and more time on social media celebrating their accomplishments and visiting other people's profiles, leading them to reflect on the rewarding experiences the other may have, and to compare and contrast.(Vogel, Rose, Roberts, & Eckles, 2014) , as a consequence, rumination (repetitive focusing on one's negative thoughts) can represent the cognitive aspect of anxiety in social relationships, and the habitual checking of upcoming social notifications through the social media platforms (Elhai, Tiamiyu & Weeks, 2018) . Thus, the more negative effect on their self-esteem, the more urge to use social media more frequently to update themselves with what is going on in others' lives (Jan, Soomro & Ahmad, 2017).

Males scored a higher level of fear of missing out than females, which is supported by other previous studies. Males are more inclined to expand their connection for more purposes and search for eligible people with similar interests, while females tend to emphasize social and emotional boundary with their family and emphasize more on the existing relationship (Gokulsing, 2014). Males scored a higher level of fear of missing out than females. Males are more inclined to expand their connection for many purposes, while females tend to emphasize the real social

and emotional bonding with their family and friends. Factors such as culture, norms, and self-image may play a role in experiencing FOMO.

Due to increase of social media websites apps and smartphones usage people have developed the Checking habit and this habit creating a sense of missing out in adults (Chotpitayasunondh & Dougla, 2016). On the other hand, Elhai et al. (2016) found that problematic smart phone usage is related with fear of missing out (FoMO) as well as with need of touch. This changed cultural and social context smartphones has infused technological led FoMO. Today's teenager has two identities to handle, one in the actual world and another in the virtual world. From past decades, accessibility of internet among teenagers and other age groups is increasing very rapidly (Hinvest & Brosnan, 2012). Smart phone usages and its related activities like music, movies, video games, facebook/twitter, chatting on mobile phones are the part of almost all teenagers' daily activities and specially those who are growing in developing countries (Arnett, 2007).

Fear of missing out (FOMO) is a term that encompasses a persistent fear of missing out on a gratifying experience while one is away, as well as a compulsive urge to keep up with what others are doing (Alt, Abel, Buff, & Burr, 2016). FOMO is defined as an insatiable want to be in two or more locations at the same time, inspired by the fear of missing out on something important in one's life. In their study, inadequacy, irritation, and media use were used to assess FOMO at various levels.

The transportation revolution, the communication revolution, and the consequent globalism were all identified by Herman (2000) as three developmental stages, or technical revolutions, in the context of FOMO. The newest surge in social media and developments in the technology of mobile devices, exponentially boosted our rapid grasp of the various possibilities available to us, Herman goes on to explain why this third revolution is so crucial. The concept of FOMO was first introduced at a meeting where attendees shared their perspectives on the topic.

Today's modern society is presented with a relatively new technical paradox. This paradox is related to the development of social media to keep in touch with family & friends, for example, the internet provides an immediate channel of communication that can be accessible via the smartphone. However, there is a downside to this effective relationship in a personal setting. The ease with which

information can be exchanged raises the possibility that something will be lost if the connection is lost. This worry is referred to as fear of missing out. (FOMO).

The fear of missing out (FOMO) is a phenomenon describing why technology is overused compulsively. It happens when individuals attempt to interact through social media with their social setting. The individual has the sensation of losing something out.

Fear of missing out (FoMO), as defined by Billieux et al. (2015), is a recent personality trait characterized by an unwillingness to miss information, including social information. Fear of losing out drives the need to stay connected to social media on a daily basis. The phrase "fear of missing out" (FoMO) was coined in the media (Fake, 2011; Morford, 2010). Fear of missing out (FoMO) causes people to miss use their smartphones in order to comfort their desire to stay connected. According to web surveys fear of missing out (FoMO) appears with motivate excessive use of social media (Przybylski, Murayama, DeHaan, & Gladwell, 2013). In a laboratory investigation, fear of missing out (FOMO) was linked to increased problematic smartphone use (Clayton et al., 2015).

Fear of Positive Evaluation

The anxiety about other people's positive appraisals of oneself, as well as the associated distress, characterized the dread of positive evaluation (Weeks & Howell, 2012).

Socially anxious persons are concerned about their social contention and that receiving positive feedback enhances the pressure to perform well led to the development of this construct (Weeks & Howell, 2012). Empirical findings suggest that patients with social anxiety disorder exhibit negative mental representations of their appearance and behavior, especially in anxiety-inducing social situations, which are consistent with models that highlight fear of favorable appraisal as a key aspect of social anxiety. (Coles, Turk, Heimberg, & Fresco, 2001; Hackman, Surawy, & Clark, 1998). These models has been benefit in defining how persons with social anxiety receive and process assessment information, as well as how these cognitive processes differ between people with high and low social anxiety (Mansell, Clark, & Ehlers, 2003; Williams, Gonsalvez, & Gordon, 2004). Existing models, on the other hand,

may ignore a key aspect of social anxiety cognition: people with social anxiety may fear both positive and negative effect.

Because those who are fearful of being assessed should avoid face-to-face engagement and instead rely on their cellphones to compensate, social smartphone use is expected to be positively connected to evaluative concerns. PSU (Hong, Chiu, & Lin, 2012, Harwood et al., 2014; Lu et al., 2011) and social media use are linked to social anxiety (Hargittai, 2007); and social anxiety is linked to both positive and negative evaluation worries (Weeks & Howell, 2012).

Fear of Negative Evaluation

The fear of negative evaluation was first defined by Watson and Friend (1969) as the anxiety about the evaluations of others, being worried about the negative evaluations, and expecting that others will evaluate one in a negative way (Watson & Friend, 1969). Fear of negative evaluation also refers to the social worry of an individual in evaluation environment (Sevimli, 2009)

The most prominent element of this individual's dread of being negatively assessed, despised, and embarrassed in the presence of others is that the individual experiences an excessive and constant fear of being negatively evaluated, despised, and ashamed in the presence of others (Cetin, Dogan, & Sapmaz, 2010). According to research, the fear of being poorly judged by others is linked to personality (Keighin, Butcher, & Darnell, 2009) and innate permanent qualities (Brumariu & Kerns, 2008).

At any given time, a person's level of social anxiety might range from fearless on one end to crippling worries and shunning on the other (Herbert, Fischer, & Fischer, 2014). People with high degrees of social anxiety are constantly apprehensive or scared of social situations in which they may be scrutinized or criticized by others. Worry or anxiety may create impairment in social or other aspects of functioning.

Fear, anger, sadness, guilt, and disgust are all examples of negative affect, which is an underlying feature of a wide range of emotional states. Negative affect was revealed to be a role in depression and anxiety disorders (Watson, 2009). The negative emotion are similar to those of sadness and anxiety (Bleil et al., 2008). Negative affect is important researching because depression and anxiety are linked to problematic smart phone uses (PSU) (Elhai et al., 2017). This distinguishable

insecurity of Internet addiction has been defined by: (1) increased investment of resources in Internet-related activities; (2) unpleasant feelings when off-line, such as anxiety, depression, and emptiness; (3) increased tolerance to the effects of being on-line; and (4) denial of the behavioral issues (Kandell, 1998).

Based on UGT and CIUT, negative affect should be linked to problematic smartphone use, since use would be a way to cope with and compensate for negative affect. Social smartphone use, and social media use in general are all linked to depression (Andreassen et al., 2016, Rosen, Whaling, Carrier, Cheever, & Rokkum, 2013). Negative affect, which is a component of both depressive and anxiety disorders, is similar to depression (Watson, 2009).

Theoretical Framework

Uses and Gratifications Theory (UGT). The Theory of Uses and Gratifications (UGT) are crucial to the consumption of electronic media, such as smartphone use. People have particular wants that they wish to be addressed by mass media, according to UGT, due to individual variances. Furthermore, in order to meet a specific need, an individual may be motivated to consume a specific type of media (Blumler, 1979; Blumler & Katz, 1974). According to UGT, demographic variables, as well as psychological and psychopathological features, may influence such media choices. Individual differences in UGT have been demonstrated to play a role in explaining PSU in recent research (Grellhesl & Punyanunt-Carter, 2012; Park & Lee, 2012; Elhai, 2017). Individuals who have a high level of FOMO can try to meet their social requirements by increasing their use of social media such as smartphone.

Applying the role of uses and gratifications to text messaging habits currently exists, and it provides additional insight into which communicative needs are met by text messaging. While entrenched in the domain of mass communication, uses and gratifications, (Eighmey & McCord, 1998). The overwhelming majority of today's youth and young adults own a smart phone and/or a computer with instant messaging capabilities, and the generation's reliance on these new media designed to keep society linked (Lipscomb, Totten, Cook, & Lesch, 2005). Mobility and instant access are two of the most compelling reasons for young individuals to possess a smartphone (Hall & Baym, 2012). Newer elements, such as synchronization of other media, such as the internet, different apps, video streaming, and interaction, according to Ruggiero

(2000), also play a big impact in young people's acceptance of technology. Another positive motivation for acquiring mobile phone technology and services for young adults is access to SMS or text messaging (Barkuus, 2005).

Many communication styles reveal gender variations in communication; research reveals that female are more proficient at using nonverbal communication, whilst males demonstrate more apprehensive traits when communicating nonverbally (Briton & Hall, 1995). Females are also better at understanding nonverbal cues from others, according to LaFrance and Henley (1994); therefore nonverbal communication plays a bigger influence in women's conduct than it does in men's. Interpersonal and group communication also reveals gender differences, with males focusing on task-oriented activities and females on socially-oriented activities (Ridgeway, 1992).

The adolescents and young adults have embraced smart phone technology, and research addressing the variations in males and females' attitudes toward mobile phones have been published (Ling & Baron, 2007), but few have focused explicitly on which gratifications male and female texting users prefer. Vankatesh and Morris, (2000) male and female differ in the adoption and use of technology finding women tend to be more open to the technology if it has a certain level of ease of use, or if the majority of women have adopted the technology because women tend to be more influenced by peer influenced normative pressures than are men Using the uses and gratifications approach to gender and mobile phone ownership, researchers discovered that female adolescents place a high value on social gratification while male adolescents place a high value on entertainment. (Reid & Knight, 2006).

Leung and Wei (2000) discovered five new gratifications when they applied uses and gratifications to smart phones rather than traditional telephony. The first is ―affection/sociability,‖ which is defined as expressing gratitude, praising others, showing care, or sending a goodnight text (Leung, 2007). ―Relaxation‖ encompasses appeasing the desire to gossip or chat, as well as relieving boredom or passing the time (Leung & Wei, 2000). Another discovered satisfaction is "immediate access," which is the ability to be accessible at any time and from any location, blurring the lines between time and space (Ling, 2004). The term "mobility" is significant since it allows users to obtain phone service from anyplace, even if there isn't a public phone

available. The fourth significant gratification is "fashion/status," which emphasized on the idea that carrying a smartphone was fashionable and anticipated by peers.

Two additional crucial gratifications, in addition to the five linked with owning a mobile phone, were discovered when specifically addressing the gratifications associated with text messaging. The first of the two includes "coordination," in which students want coordination when texting or connected because it allows them to arrange phone conversations later, explain or coordinate when they will interact next, and synchronise when they will instant message one another. ―Escape" is a form of gratification in which students report ―sending/receiving SMS messages when they wished to get away from what they were doing, put off something they should be doing, or play tricks on others." (Leung, 2007). U&Gs tested, women reported significantly higher scores for this access and mobility than did men. One explanation of this could be based on past research conducted by Leung and Wei (2000) which suggested women made contact with family members, and engaged in detailed conversations while on the go as opposed to men who used the mobile phone for business reasons or brief conversations. Current study findings would suggest consistency when substituting text messaging in place of mobile phone voice talking.

Behavioral Theory for Problematic Smartphone Use

The desire to repeat events that occurred as a result of an initial exposure to stimuli is defined as addiction. After a number of repetitions of the behavior stimulation cycle, the addiction is detected. The kind and severity of the addiction may fluctuate over time, and it may be influenced by the sufferer's attempts to achieve control over his habit in order to hide it. This theory related to smart phone addiction in this way when we repeatedly checking the mobile notification and different mobile apps, after sometime this habit convert into addiction behavior and it very hard to control this habit. We continuously checking our smart phone without any reason and addicted this behavior.

Operant condition appears to have a critical role in the formation of addicts, particularly in circumstances when the role of previous experiences, particularly those that are reinforced by positive reinforcement, is important. Previous activities that have resulted in desirable consequences, whether positive or negative reinforcement,

are more likely to be repeated in the future. When there is a more promising payoff for often done acts, the ultimate outcome is the establishment of that action (Hyman, 2005; Mazur, 2006).

When an individual receives a ―reward" from a smartphone connection, operant conditioning kicks in, and neurotransmitters are released, resulting in an increase in additional exchange of activity with the gadget. Increased smartphone use may lead to the development of an excessive appetite for the device's extensive use, resulting in functional impairment. The conduct can then become an unconscious mobile checking habit habit as a result of these strong desires (Rush, 2011).

In the study, Neal, Wood, and Quinn (2006) discovered that when a certain path of achievement has been consistently rewarded, that particular behavior aimed at achieving a goal is active and is automatically triggered with the certainty of future reward provision. These natural behaviors can lead to the development of a habit and, in the worst-case scenario, addiction. To aid this habit configuration, smart devices can quickly deliver salient incentives.

They facilitate people to avoid monotony and deal with a need of stimuli in daily situations at the same time make them aware of attractive events happening around that can be enjoyed use of social network. The rewards that were afforded by smart-devices could direct to checking habit and donate to the extent of participation the person has with their smart-devices as well as overall usage of the device for his purpose (Oulasvirta, Rattenbury, Ma, & Raita, 2012).

When a person engages in a behavior on a regular basis, it becomes habitual and more common. A smart phone is a device with a variety of appealing features that entice people to use it. These features entice people to use it again and again for no apparent reason, which is why the majority of smart phone users grow addicted to it. This addiction can have long-term harmful effects

Theoretical Framework of Fear of Missing Out

Self-determination Theory (SDT).   FOMO has been discussed in term of the self-determination theory and the need to belong theory for former approach propose that deficits in psychological needs. Self-determination theory (SDT), created by Ryan and Deci, and applied by Przybylski et al. to explore what drives FOMO,

was first used to conceptualize FOMO. Self-determination theory (SDT) tries to explain how personality is developed as well as the psychological requirements that drive it. According to self- determination theory (SDT), intrinsic motivation is more important than extrinsic incentive in enhancing mental health, and intrinsic motivation is best cultivated when one feels socially connected to others. As a result, social connectedness, according to self-determination theory, can inspire intrinsic drive, which in turn can promote good mental health. Fear of missing out was studied using self-determination theory (SDT), with Przybylski et al. (2013) hypothesizing that fear of missing out is a negative emotional state brought on by unmet social relatedness expectations. The belief that fear of missing out has a negative impact due to unmet social expectations is linked to opinions on the negative emotional impacts of social isolation.

Following that, looked at whether fear of missing out influences negative affectivity, such as despair and anxiety, or whether fear of missing out influences negative affectivity. For example, fear of missing out has been proposed as a driving factor for negative affectivity in various studies. Other studies, on the other hand, have identified negative affectivity as a predictor of FOMO. It's unclear whether fear of missing out contributes to poor affectivity.

Theoretical Context of Fear of Positive Evaluation

The current study is the first to investigate fear of positive evaluation (FPE) as a possible social anxiety sign. The ethological–psychobiological (psycho-evolutionary) model of social anxiety proposed by Gilbert and colleagues (2001) is partially congruent with this approach (Trower & Gilbert, 1989; Trower, Gilbert, & Sherling, 1990). Self-evident threat exchanges, according to this theory, are directly linked to social anxiety in humans. The purpose of social anxiety is to keep within the group's safe bounds while not unnecessarily confronting the dominating member. In presenting his ethological–psychobiological model, Gilbert stated, "Those who feel inferior may dread rises in status that would drive them into confrontation with others, or they may fear that such gains could not be sustained or secured in the future. This idea was coined by Gilbert (2001) as the "fear of positive evaluation." Furthermore, Wallace and Alden (1997) reported that socially anxious persons, in line with Gilbert's (2001) perspective They judged their social performance positively after

being exposed to positive social signals via structured social interaction role plays, and they were concerned that others would expect more of them (Alden, Mellings, & Laposa, 2004). These findings highlight the significance of further research into the impact of good social feedback on social anxiety. Dread of eventual negative appraisal, according to (Wallace & Alden, 1997), explains for acute fear of positive appraisal, implying a lack of difference between the notions of Fear of positive evaluation (FPE) and fear of negative evaluation (FNE). As a result, one of the goals of this study was to see if FPE plays a distinctive role in predicting social anxiety. They did, however, believe that their typical performance would not be affected. As a result, unlike persons without social anxiety, they were anxious that a positive first impression might lead to a poor second impression.

Cognitive Model of Social Anxiety-Fear of Negative Evaluation

Social anxiety is viewed as an issue in cognitive processing in cognitive models (Clark & Wells, 1995; Rapee & Heimberg, 1997). Individuals who are socially anxious are said to have a strong fundamental belief that they will be judged badly in social circumstances. Fear of negative evaluation (FNE) has been coined to describe this notion. This concern creates a cognitive bias in which one focuses on the prospect of others noticing a perceived flaw in one's look or behavior (Clark & Wells, 1995). As a result, there is a proclivity to look for negative feedback from people in the environment (Rapee & Heimberg, 1997). When a perceived threat is detected, it usually causes enough worry to interfere with one's actual performance in the case of a socially anxious person with performance deficits. In these circumstances, the socially anxious individual may demonstrate difficulty in their interactions for example, getting so apprehensive that they stammer throughout chats, confirming their unfavorable bias (Turk, Heimberg, & Magee, 2008). The creation of a negative feedback loop as a result of this pattern enhances the likelihood of concerns being realized. The excessive fear of unfavorable assessment that socially anxious persons experience is the clear key in this model. There is a lot of evidence that fear of negative evaluation (FNE) is a common symptom of social anxiety. Leary, Kowalski, and Campbell (1988) looked at the role of self-presentational concerns in both anxious and non-anxious participants. Participants in one study were asked to envision how they would be regarded after a glimpse, a short chat, or a long conversation. Socially nervous participants, regardless of condition, believed they

would be judged more adversely than non-anxious participants. In a follow-up study, socially anxious participants believed the evaluator would rate others poorly as well, whereas non-anxious people believed they would be evaluated more positively than other participants. There have also been researches that show that socially anxious people have the negative cognitions that are often related with FNE. For example, Schulz, Alpers, and Hofmann (2008) examined the impact of negative self-focused cognitions and found that negative evaluative statements such as, ―What I say will probably sound stupid" mediated the relationship between trait social anxiety and state anxiety. Similarly, Makkar and Grisham (2011) evaluated factors predicting engaging in negative self-focused cognitions following social situations. . A negative self-focused review was more likely to occur after a public speech than after a conversation, according to this study, and negative self-assumptions were a distinct predictor of negative self-focused review. Negative cognitions particularly negative evaluative cognitions play a significant influence in the presentation of anxious symptoms in social contexts, according to these researches.

Relationship between Problematic Smart Phone Usages with Age and Gender

Male and female are known to use smartphones in a variety of ways, with younger individuals being the most knowledgeable about mobile technology. A study of risk factors for problematic online use discovered that demographics have a role in its incidence (Billieux & Linden, 2012). Women are much more socially inclined than men (Lee et al., 2014), making social media more intriguing to them (Duggan & Brenner, 2013). Furthermore, women are more likely to feel the disagreeable effects of negative social events and so expertise higher levels of social stress (Troisi, 2001). Finally, based on the majority of studies on online addiction, males are more likely than females to interact in habitual or habit-forming smartphone activities (Choi et al., 2009, Morahan-Martin & Schumacher, 2004). Study found that men scored high on information seeking and entertainment, and women on socializing. Rozgonjuk and Elhai, (2019) a study found that the daily application most used by females, more than males is whatsaphat, a smart phone communication app that facilities the exchange of instant message and multimedia contents (Montag et al., 2015). However the general idea is that people are not dependent on the smartphone itself, but rather on one or more activities that can be performed through device (e.g., gaming, social networking and chatting). Older people are less inclined to accept new technologies than younger

people. Males, on the other hand, prefer method-oriented activities like gambling, gaming, and watching erotica (Frangos & Kiohos, 2010). Emotional intelligence and social stress differences between men and women may also exist. Girls are more likely than boys to be emotionally aware, utilize more emotion-related language, and use a wider range of emotional management systems (Barrett et al., 2000; Nolen-Hoeksema, 2012). Women are also more prone to suffer the negative effects of unfavorable social situations, resulting in higher levels of social stress (Charness & Bosman, 1992; Troisi, 2001). Furthermore, on the Internet, adolescents are less concerned with money and wages and more concerned with joyful experiences. Moreover, they rely significantly on social media for communication (Howe & Strauss, 2004; Lenhart et al., 2010). Expect youth to engage in more uncontrolled, regular, and addictive smartphone activity than older adults due to their reliance on online communication. Smartphone ownership in the United States is remarkably stable across assessed demographics like gender, race, and geographical development. Where age, income, and education are investigated, the most important contrasts are shown. For instance, 94% of 18-29-year-olds own a smartphone.

According to previous study, elderly adults are less inclined to embrace new technologies than younger people. Part of the reason for this, according to Brickfield, is that older individuals have fewer positive attitudes toward various technologies than younger people, making them less willing to employ new technical products. We wouldn't expect elderly mobile phone users to spend as much time on their phones as younger users, or to have as many phone-related problems, based on this information.

There appear to be gender variances when it comes to adopting new technology. Men, for example, are more likely than women to have positive attitudes toward computers, and hence are more willing to embrace computer technology, according to previous studies. As a logical extension of this, guys are more likely than females to become victims of problematic computer and Internet use since they are more inclined to use computers in the first place. According to some study, this is indeed the case.

Relationship between Problematic Smart Phone Usages (PSU) and Fear of Missing Out (FOMO)

FOMO has been explained in scientific literature as a fear that others are experiencing rewarding experiences that one is missing out on, as well as a constant need to keep connected with others in one's social network. The first part corresponds to the cognitive portion of anxiety. In the early years of this decade, social media influences became more prominent in social debate. It might be argued that as the use of social media websites, apps, and cellphones has increased, people have developed the Checking habit, which causes them to feel as if they are missing out (Douglas & Chotpitayasunondh, 2016).

The last component entails a behavioral technique targeted at reducing anxiety, similar to how compulsions in obsessive compulsive disorder try to reduce anxiety. Currently, the most common symptom of FOMO is frequent checking of social media sites and messaging services in order to preserve social ties and prevent missing out on valuable encounters. The constant online checking behavior associated with FOMO is not only proactive, i.e. when people have free time to browse their internet-enabled devices such as smartphones, but it is also reactive, i.e. when people receive numerous social-related notifications throughout the day to which they feel compelled to respond. On the one hand, social-related notifications are beneficial to one's social life and are well-liked because they satisfy and relieve fear of missing out (FOMO).

For many people, online social engagement can help them build their social capital. Interruptive smartphone and computer notifications and the resulting checking behavior are known to have negative consequences. Due to _switching costs," which make it difficult to return to and complete the activity at hand, such notifications might cause a distracted and less focused everyday experience, affecting concentration and interrupting work, school, and other daily life activities. As a result, FOMO can lead to an excessive amount of monitoring for and responding to social media notifications, making it difficult to be productive in everyday life. In this context, we also address how, in the age of surveillance capitalism, the number of aspects integrated into social media apps that evoke FOMO should be regulated in order to extend usage duration and gather more personal data. As Problematic use of

other forms of internet technology, such as cellphones, is crucial since abuse can have negative health and functional repercussions. FOMO has also been studied in relation to levels of problematic smartphone use in a number of studies. Self-report methodologies and a correlational, cross-sectional research design were employed exclusively in these studies. Several research including people of all ages have discovered moderate to substantial positive relationships between FOMO and problematic smartphone use. FOMO and other negative consequences of smartphones have also been studied. FOMO has been linked to disrupted everyday activities as a result of smartphone notifications, as well as distracted pedestrian behavior as a result of smartphone use.

Rationale of the study

While smartphone technology has improved many elements of human life, such as business, education and health, certain negative consequences associated with smartphone usage patterns have increased rapidly, particularly among teenagers who are overly dependent on smart phones. Excessive usage of mobile phone is paired with both physiological and psychological problems. Young people are the prime behavior with severe academic and social outcomes (like spent most of the time on mobile and human interaction becomes rare). Many users express anxiety that their usage is excessive, uncontrollable, or disruptive, and thus it may interfere with their daily life. According to Horwood and Anglim (2018), in US 66% of young adults spend more time on their smartphone than they intended , and 44% said they used their smartphone when they should be doing something else, that leads to impaired daily functioning in term of productivity, social relationship, physical health , or emotional well-being. Since smartphone use has continuously grown in this population and is expected to continue in the future, researchers have begun to examine the influence of smartphone- related screen time and problematic usage of smartphone on various development and health –related outcomes among adolescents and young adults. In 2019, a research conduct in Pakistan, the frequency of mobile phone usage was more in males (70%) as compared to females (30%). Most of youth use mobile phone in night (60%) and (40%) participants reported that they are using mobile phone for multiple reasons (Farooq, Ali, Mahmoud, Farzand, & Mujahid, 2019).

Past studies indicate that different demographic variables play a crucial role in development of smartphone usage and addiction. Adolescences and young adults is a stage of development in which people experience a wide range of unpleasant family, social, and academic events and encounters. Adolescents and young adults who are suffering typical psychological stresses may rely on technology such as mobile phones, computers, the internet, or video games to ease unpleasant feelings and overwhelming emotions. As a result, the present study intends to study the sample of adolescents and young adults with reference to smartphone usage (Pearson & Hussain, 2015).

Age and gender have all been related to problematic smartphone usage (Saritepeci, 2020; Sandy, Sling, & Durant, 2013; Veissiere & Stendel, 2018). Male adolescents were more likely than female adolescents to depend on their smartphones. According to previous research, this link between male gender and smartphone usage might be explained in part by the fact that males place a higher emphasis on interpersonal contact and are more socially connected than females. Adolescents are a vulnerable development stage for deficits in emotion regulation, and these are linked to excessive smartphone use.

The sample of university students was selected for the research they is new generation and was mostly uses the technologies for their purpose. As they get admission in universities they face many new situations in their daily life where they need to be more capable to cope with stressful scenario and handle their emotion in the positive and sometime negative way. The finding will be helpful for educators, students and counselor who can guide parent and university students how to manage their distress and fears in any situation and how uses technologies for their purpose in the positive way.

In Pakistan too many researches previously had done on problematic mobile phone usages but with some other variables. The basic aim of present study is to identify the relationship between variables such as fear of missing out, fear of positive and negative evaluation, problematic smart phone usage and smart phone addiction and to explore gender differences among university students. This research can assist for future implementation for whose major fear of missing out, fear of positive and negative evaluation. This is the small effort to understand different smart phone

usages problems among youngster the present research will help in future to install further studies and more information about these variables.

Although these finding warrant replication, the present study emphasized the importance of research that examine how adolescents and young adults suffer from problematic smartphone and the potential cause, linked with cognitive emotion relation style for reducing mood, contributing to a fruitful target for the prevention of and intervention in psychological important associated with technology addiction in adolescents and young adults.

METHOD

Chapter 2

Method

Objectives

The objectives of the present research are to study:

1. The relationship between fear of missing out (FOMO), fear of positive and negative evaluation, problematic smart phone usage, and smart phone addiction among university students.
2. The relationship of demographic variables (age, gender, and education level, models of mobile phone) with the study variables.

Hypotheses

1. There will be positive relationship between fear of missing out (FoMO), fear of positive and negative evaluation, problematic smart phone usages (PSU) and smart phone addiction among university students.
2. Males will score higher on fear of missing out, fear of positive and negative evaluation, problematic smart phone usage and smart phone addiction in comparison to females.
3. Adults will score high on fear of missing out, fear of positive and negative evaluation, problematic smart phone usage and smart phone addiction in comparison to late adolescences.

Conceptual and Operational Definitions of Variables

Fear of missing out. Fear of missing out (FoMO) is defined as "a chronic fear that others are having rewarding experiences while one is absent," as well as "a constant need to be updated with what others are doing" (Przybylski et L., 2013). In this study, the Fear of Missing Out Scale (Przybylski et al., 2013) is used to assess fear of missing out. A high score on the scale indicates a higher fear of missing out, whereas a low score indicates a low fear of missing out. (Przybylski & Weinstein, 2013).

Fear of Positive and Negative Evaluation

Fear of positive evaluation. The fear of positive evaluation involves feelings of apprehension about other's positive evaluation of one self and associated distress (Weeks & Howell, 2012).The Fear of Positive Evaluation Scale (Weeks, Heimberg, & Rodebaugh, 2008) is being used in the present research. High score on the scale indicated high fear of positive evaluation and low score indicated low fear of positive evaluation (Vogas, Rojo, & Salvador, 2015).

Fear of negative evaluation. Fear of negative evaluation is a psychological notion characterized by ―apprehension about others' evaluation distress about others' negative evaluation, and the expectation that others would adversely judge an individual" (David, Watson, Ronald, & Friend, 1996). Fear of Negative Evaluation Scale (Leary, 1983) is being used in the present research. Low scores indicate a low level of fear of negative evaluation whereas high scores indicate a high level of fear of negative evaluation (Leary, 1983).

Problematic smart phone usages. Problematic Smartphone Usage is a term that describes excessive smartphone use that interferes with work, school, or social activities. (Billieux, Maurage, & Fernandez, 2015). The Problematic Smart Phone Usages Scale (Billieux et al., 2015) is used in current research. Individuals who reported more symptoms of problematic mobile phone use on the Problematic Uses of Mobile Phone Scale (Billeux et al., 2015) were more likely to endorse feeling ―adicted" to their cellular phone (Foerster, Roser, Schoeni, & Roosli, 2017).

Smartphone addiction. Any pattern of mobile phone usages resulting in subjective distress or impairment in important areas of functioning leads to smartphone addiction (Bibbey, Merlo, & Stone, 2013). The Smart Phone Addiction Scale (Kwon, Lee &Won, 2013) was used in the current research. Scores vary from 13 to 78, high score represent more smartphone addiction. The scale is cut-off value of 31 in boys and cut-off value of 33 in girls. Higher score indicates more serious smartphone addiction.

Instruments

Following instruments were used in present research

      Fear of Missing Out Scale. The Fear of Missing Out Scale (Przybylski et al., 2013) is an English language and 10 items scale, with responses ranging from ―1= *not all true of me* ―to 5 = *extremely true of me*". This scale has no subscale and no reverse scored items. This scale measure anxiety that individuals currently experience when they miss out on social events, such as going out with friends (Przybylski et al., 2013). Alpha reliability of this scale we found to be ranging from .90 (Griffiths & Niu, 2020). Scores could range from 10 to 50. A high score on the scale indicates a high fear of missing out, whereas a low score indicates a low fear of missing out (Servidio, 2021).

      Fear of Positive Evaluation Scale. The Fear of Positive Evaluation Scale (Week & Howell, 2012) is an English language scale comprising of 10- items. Responses vary from 0 = ―*not at all true*" to ―9 = *very true*". The scale includes two reversed- scored items (5, 10). The scale has no subscales. The alpha coefficient of this scale was found to be .80 (Weeks & Howell, 2012). High score on the scale indicates high fear of positive of evaluation and low score indicated low fear of positive evaluation (Weeks, Heimberg, & Rodebaugh, 2008).

      The Fear of Negative Evaluation Scale. The Fear of Negative Evaluation Scale (Leary, 1983) is an 8 item English language scale. Response options range from ―1 = *not at all characteristic of me*" to 5 = *extremely characteristic of me*". Item number 2, 4, and 7 are reverse scored. Alpha reliability of this scale was found to be .91 (David, Watson, Ronald, & Friend, 1996). This scale has no subscale. Low scores indicate low levels of fear of negative evaluation whereas high score indicates high level of fear of negative evaluation. (David, Watson, 1996).

      Problematic Uses of Mobile Phone Scale. Problematic Uses of Mobile Phone Scale is an English language measure (Merlo, Stone, & Bibbey, 2013) comprising of 20 items with response using range from 1= ―*strongly disagree*" to 5= ―*strongly agree*". This scale has no reversed score. The alpha coefficient of this scale was finding to be .90 (Pamuk & Atli, 2016). This scale has no subscale. Individuals who reported more symptoms of problematic mobile phone use on the Problematic

Uses of Mobile Phone Scale were more likely to endorse feeling ―addicted" to their cellular phone.

Smart Phone Addiction Scale.   The Smart Phone Addiction Scale (Kwon, 2013) is 10 item, English language scale with response options ranging ―1= *strongly disagree*" to ―6 = *strongly agree*". This scale has no subscale and no reverse scored items. Coefficient alpha was found to be .91 (Demirci, Orhan, & Demirdas, 2014). The scale is cut-off value of 31 in boys and cut-off value of 33 in girls. Higher score indicates more serious smartphone addiction.

Research Design

The present research uses cross sectional correlation research design.

Sample

Data of the study were collected through purposive sampling technique. Sample for the study involved both male ($n = 151$) and female ($n = 199$) university students.   Only those individuals were selected for the study who were able to understand and comprehend English language and had their own mobile phone. The age of the sample ranged from 18- 30 years, with a mean age of 22.27 ($SD = 2.23$).

The demographics of the sample are briefly summarized below,

Table1

Variables	f (%)	Variables	f (%)
Age		**Department**	
18-25(late adolescents)	303 (86.6)	Social sciences	147 (42.0)
26-30 (early adults)	47 (13.4)	Natural sciences	101 (28.9)
Gender		Biological sciences	102 (29.1)
Females	205 (58.6)	**Which apps mostly used**	
Males	145 (41.4)	Whatsapp	178 (50.9)
Education level		Instagram	51 (14.6)
Bachelors/ master	237 (67.7)	Facebook	55 (15.7)
m. Phil/Ph.D.	113 (32.3)	Twitter	39 (11.1)
Problemtic mobile phone users		Snap chat	27 (7.7)
Problematic mobile phone users	107 (30.6 %)	Males (problematic users	65 (31.7 %)
Non- problematic users	243 (69%)	Male (non- problematic users)	140(68.3%)
Female (non- problematic users)	103(71%)	Females (problematic users)	42 (29%)

Table 1 represents the percentage and frequency wise distribution of all demographic variables of the study. The number of females was higher in comparison to males. Late adolescents were more in number in comparison to early adults. WhatsApp and Facebook is most frequently used app in comparison to snap chat and Instagram. Non- Problematic mobile phone users higher than problematic mobile phone users, in comparison males and females, males higher on non- problematic use and female higher on non- problematic use.

Procedure

For the purpose of data collection different universities of Islamabad were approached. Permission was taken from the administration of the institute. As study sample were university students males and females, scales were administered. Inform

consent was taken from each student they were given the instruction verbally and in written a well. The participants were ensured that their response will be kept confidential and would be used for research purpose only. The participants were then provided the booklet of the demographic sheet, Fear of Missing out Questionnaire, Fear of Positive and Negative Evaluation Scale and Problematic Uses of Mobile and smartPhone Addiction Scale. The students were instructed to fill the questionnaire honestly according to their behavior and experiences. At the end students were thanked for their participant and cooperation.

RESULTS

Chapter 3

Results

   The present research aim to explore the relationship of fear of missing out, fear of positive and negative evaluation, problematic mobile phone usages and smart phone addiction among university students. Reliability was determined using cronbach's alpha coefficient. Descriptive statistics shows the normality of data computed. Correlation was computed to find the relationship between variables. To find the mean difference *t*-test and ANOVA was computed.

Reliability Estimate and Descriptive Statistics of Measures

   In order to establish internal consistency of study measure reliability analysis was carried out.

Table 2

Alpha Reliability Coefficients and Descriptive Statistics of Fear of Missing Out, Fear of Positive, and Negative Evolutions and Problematic Mobile Phone Usages and Smart Phone Addiction (N=350)

Scales	k	A	M	SD	Range		Skew	Kurt
					Potential	Actual		
FoMO	10	.82	27.07	7.61	10-50	10-46	.80	-.38
FPES	10	.71	43.68	13.27	10-90	17-81	.19	.14
BFNE	08	.87	21.33	7.47	10-50	16-35	.38	-.39
SPAS	10	.80	28.57	7.77	10-50	10-50	.13	-.14
PUMP	20	.90	56.28	14.45	20-100	20-99	.13	.12

Note. FoMO=Fear Of Missing Out, FPES= Fear of Positive Evaluation; BFNE= Brief Fear of Negative Evaluation, SPAS= Smart Phone Addiction Scale, PUMP = Problematic Usage of Mobile Phone.

 Table 2 indicates that the reliability of scale ranges from .71 to .90. It can be concluded that all study measures are internally consistent. The values of skewness and kurtosis are also within the range thereby providing the evidence for normality of data.

Relationship between fear of missing out, fear of positive and negative evaluation and problematic mobile phone usages and smart phone addiction.

Pearson correlation was computed to evaluate the relationship between fear of missing out, fear of positive and negative evaluation, problematic mobile phone usages and smart phone addiction among university students.

Table 3

Correlation among Study Variables (N=350)

	Variable	FOMO	FPES	BFNE	SPAS	PUMP
1	FoMO	-	.23**	.28**	.38**	.49**
2	FPES		-	.30**	.21**	.20**
3	BFNE			-	.34**	.33**
4	SPAS				-	.79**
5	PUMP					-

Note. FOMO=Fear Of Missing Out, FPES= Fear of Positive Evaluation, BFNE= Brief Fear of Negative Evaluation, SPAS= Smart Phone Addiction Scale, PUMP = Problematic Usage of Mobile Phone.

Table 3 indicated that a significant positive relationship between fear of missing out, fear of positive and negative evaluation, smart addiction and problematic smart phone. There is significant and positive relationship between fear of positive evaluation, fear of negative evaluation, smart phone addiction and problematic smart phone usages. There is positive and significant relationship between fear of negative evaluation, smart phone addiction and problematic smart phone usages. There is positive and significant relationship between smart phone addiction and problematic smart phone usages.

Table 4

Stepwise Regression Analysis for Predication of Problematic Smart Phone Usage (N= 350)

| | | | | Smart phone addiction | |
| | | | | Cl 95% | |
Variables	*B*	R^2	*F*	UL	LL
Step 1					
Constant		.63	593.27**	2.53	6.54
PUMP	.42**			.39	.46
Step 2					
Constant		.64	304.40**	-3.25	4.22
PUMP	.41**			.37	.44
BENE	.21*			.06	.37

NOTE. FOMO=Fear Of Missing Out, FPES= Fear of Positive Evaluation, BFNE= Brief Fear of Negative Evaluation , SPAS= Smart Phone Addiction Scale, PUMP = Problematic Usage of Mobile Phone

In order to assess the predictive role of study variables in smartphones addiction regression analysis was carried out. Finding indicated that smartphone addiction emerged as positive and strongest predictor of problematic usage of smartphone accounting for 63% of variance in problematic usage of smartphones. Brief fear of negative evaluation as an additional predicator in step 2 accounting for .21 %.

Table 5

Mean Differences across Gender and Study Variables (N = 350)

| Variables | Male (n=205) | | Female (n=145) | | $t_{(348)}$ | p | 95% CI | | Cohen's d |
	M	SD	M	SD			LL	UL	
FOMO	27.72	7.76	26.15	7.33	1.91	.05	.04	3.19	.20
FPES	43.27	10.21	44.29	10.66	.97	.36	3.23	1.20	
BFNE	23.77	3.37	25.34	2.97	1.22	.22	.26	1.11	
SPAS	29.55	7.98	28.60	7.62	.05	.95	1.71	1.61	
PUMP	57.04	14.99	55.20	13.63	1.17	.24	1.23	4.92	

NOTE. FoMO=Fear Of Missing Out, FPES= Fear of Positive Evaluation, BFNE= Brief Fear of Negative Evaluation , SPAS= Smart Phone Addiction Scale, PUMP = Problematic Usage of Mobile Phone. ,

Table 5 indicated that significant means difference exist across fear of missing out and fear of positive evaluation where males scored high in comparison to females. Non-significant difference was apparent across all other study variables.

Table 6

t-test Showing Comparison Along problematic use of mobile phone and non-problematic use of mobile phone on Study Variables (N=350)

| Variables | Non-problematic users (n=243) | | Problematic mobile phone user (n=107) | | $t_{(348)}$ | p | 95% CI | | Cohen's d |
	M	SD	M	SD			LL	UL	
FOMO	25.27	6.64	31.14	8.12	7.09	.00	-7.49	4.24	.79
FPES	42.82	10.57	45.69	9.75	2.39	.01	5.22	.51	.28
BFNE	23.22	3.37	24.43	2.66	3.30	.00	1.94	.49	.39
PUMP	50.69	10.77	69.79	12.53	14.7	.00	22.0	16.8	1.63

NOTE. FoMO=Fear Of Missing Out, FPES= Fear of Positive Evaluation, BFNE= Brief Fear of Negative Evaluation , SPAS= Smart Phone Addiction Scale, PUMP = Problematic Usage of Mobile Phone. ,

Table 6 t-test Showing Comparison Along problematic use of mobile phone and non- problematic use of mobile phone on Study Variables indicated that there is significant means difference was apparent across all study variables fear of missing out and fear of positive and negative evaluation and problematic use of mobile phone.

Table 7

Mean Differences along Age and Study Variables (N= 350)

Variables	Late adolescences (n=303)		Early adults (n=47)		$t_{(348)}$	p	95% CI		Cohen's d
	M	SD	M	SD			LL	UL	
FOMO	26.84	7.61	28.55	7.55	1.43	.15	4.05	.63	
FPES	43.46	10.43	45.23	10.17	1.08	.27	4.97	1.43	
BFNE	23.53	3.26	24.00	3.31	.92	.35	1.46	.52	
SPAS	28.48	7.63	29.14	8.70	.54	.58	3.06	1.73	
PUMP	55.64	13.84	60.36	17.53	2.09	.03	9.15	.27	.29

NOTE. FoMO=Fear Of Missing Out, FPES= Fear of Positive Evaluation, BFNE= Brief Fear of Negative Evaluation, SPAS= Smart Phone Addiction Scale, PUMP = Problematic Usage of Mobile Phone

Table 7 indicated that significant means difference exist across problematic uses of mobile phones where early adults scored high in comparison to late adolescences. Non-significant difference was apparent across all other study variables.

Model of mobile phone. Mean difference were computed for the students from models of mobile phone,

Table 8

Models of Mobile Phone Usages Difference on Study Variables (N =350)

Variables	Android (n=81)		IPhone (n=269)		t (348)	P	95% CI		Cohen's d
	M	SD	M	SD			LL	UL	
FOMO	26.25	7.49	29.8	7.42	.74	.00	-5.41	-1.68	.47
FPES	43.28	10.35	45.07	10.5	.35	.17	-4.37	0.8	
BFNE	23.48	3.15	23.95	3.42	.13	.25	-1.26	0.33	
SPAS	28.41	7.93	29.09	7.21	.69	.48	-2.62	1.25	
PUMP	55.92	14.23	57.46	15.17	.84	.39	-5.15	2.05	

NOTE. FoMO=Fear Of Missing Out, FPES= Fear of Positive Evaluation, BFNE= Brief Fear of Negative Evaluation , SPAS= Smart Phone Addiction Scale, PUMP = Problematic Usage of Mobile Phone.

Table 8 illustrates the results of independent sample *t*-test which reflects that significant means difference was apparent for fear of missing out across models of mobile phones. Where I phone use scored higher in compare to android user.   Non-significant different were apparent across all other study variables.

Education and mean differences. Mean differences were computed across various groups of samples based on the demographics of the university students. The groups were formulated on the basis of, educational level (*Bachelor, Master, MPhil, and PhD)*, and demographics having three groups are analyzed through ANOVA

Table 9

T-test Showing Comparison along Education on Study Variables (N=350)

Variables	Bachelor /Master (n=237)		MPhil /PhD (n=113)				95%CI		
	M	*SD*	*M*	*SD*	*t* (348)	*P*	*LL*	*UL*	*Cohen's d*
FOMO	27.27	7.42	26.75	8.02	.54	.58	1.23	2.19	
FPES	44.34	10.70	42.35	9.63	1.67	.09	.34	4.32	
BFNE	23.64	3.40	21.78	2.80	.39	.00	.57	.85	.59
SPAS	28.23	7.74	29.37	7.82	1.16	.24	2.78	.70	
PUMP	57.38	14.64	54.56	10.10	.09	.92	3.41	3.09	

NOTE. FOMO=Fear Of Missing Out, FPES= Fear of Positive Evaluation , BFNE= Brief Fear of Negative Evaluation , SPAS= Smart Phone Addiction Scale, PUMP = Problematic Usage of Mobile Phone. ,

In table 9 shows that there significant mean differences was apparent on fear of negative evaluation across education where individuals with bachelor and master level of education scored higher as compare to individuals with M.Phil and Ph.D level of education.

Table 10

One Way ANOVA Showing Comparison Along Apps Most Frequently Use on Study Variables (N=350)

Variables	Watsapp (n=178) M (SD)	Twitter (n=39) M (SD)	Instagram (n=55) M (SD)	Facebook (n=51) M (SD)	Snap chat (n=27) M (SD)	F	P	i-j	D(i-j)	95%CL LL	UL
FOMO	26.75 7.71	28.07 7.46	25.33 7.90	27.74 6.78	29.62 7.79	1.79	.13				
FPES	43.92 10.06	42.53 10.85	42.82 9.94	43.87 10.59	45.29 12.78	.157	.96				
BFNE	25.43 2.93	23.35 3.79	22.94 2.88	24.27 3.85	24.81 2.96	2.29	.04	1>5 3>4 3>5	-1.37 -1.33 -1.87	-2.67 -2.55 -3.36	-.07 -.11 -.37
SPAS	28.65 8.49	27.12 6.35	29.21 7.18	25.40 6.79	29.25 7.82	.48	.74				
PUMP	56.30 15.69	53.30 12.24	55.86 12.26	57.00 12.74	60.11 15.75	1.01	.40				

NOTE. FOMO=Fear Of Missing Out, FPES= Fear of Positive Evaluation, BFNE= Brief Fear of Negative Evaluation , SPAS= Smart Phone Addiction Scale, PUMP = Problematic Usage of Mobile Phone.

In table 11 shows that there is snap chat user score higher on fear of negative evaluation in compare to WhatsApp user. Facebook users are score higher on fear of negative evaluation in compare to Instagram. Snap chat user score higher on fear of negative evaluation in compare to Instagram.

DISCUSSION

Chapter 4

Discussion

The current study aimed to find out the relationship between fear of missing out, fear of positive and negative evaluation, problematic smart phone usage and smart phone addiction. It also aimed to explore the relationship demographic (age, gender, education) with study variables. The major construct of the study were assessed with Fear of Missing out (Przybylski et al., 2013)), Fear of Positive Evaluation (Week & Howell, 2012), Fear of Negative Evaluation Scale (David, Watson, Ronald, & Friend, 1996), Problematic Usage of Mobile Phone (Billieux et al., 2015) and Smart Phone Addiction Scale (Kwon, 2013).

In the present study correlational research method was used. Data has been conduct by purposive and convenient sampling technique from different universities of Islamabad because sample was easily available in academic setting. The age range was target from 18 to 30 years with a mean age of 22.27 (SD = 2.23).In order to find out the relationship between study variables. Pearson product moment correlations were used.

To determine the psychometrics soundness of scale used in the study alpha reliabilities were computed. It was evident that reliability values of all the scales and their subscales in the present study were psychometrically sound ranging from. 71 to .90 (see table 2) which shows scales are reliable and internally consist. The values of skewness and kurtosis lies between absolute values of ±2 therefore data can be considered as normally distributed.

Hypothesis 1 state that there will be a positive relationship between fear of missing out (FoMO), fear of positive and negative evaluation, problematic usage of mobile phone (PSU) and smart phone addiction among university students. Results of the study revealed that there was a significant positive relationship among the study variables stated in Hypothesis 1. This indicates that with increase in FOMO, the fear of positive and negative evaluation, problematic usage of mobile phone and smart phone addiction also increases. The results of the study are supported by the past literature. Studies supporting the positive relationship between FOMO and PSU indicated that people heavily rely on the social media platforms to satisfy their need of

social dependency and to feel connected with their significant others that fear of missing out was significantly related to fear of of positive and negative evaluation, problematic smart phone usage and smart phone addiction (see table 3). Results support the other correlation that is fear of negative evaluation was significantly associated with PSU. Results supports at the univariate level, regarding fears pertaining specifically to negative evaluation and problematic smart phone use (PSU) (Hong et al.,2012; Lu et al., 2013). Finding suggests that fear of negative evaluation, an individuals, differences variables, can drive PSU as a means to compensate for such fear. However, neither fear of positive nor negative evaluation was associated with social smartphone use specifically.

These aspects compel them to stick to their smartphones. Moreover, Hook Model supporting the results of the current study revealed that problematic mobile phone usage significantly positively predicts smart phone addiction The Hook model was developed by (Fogg & Eyal, 2020) is based on reinforcement theory in the formation of habitual behavior, which can be traced back to reinforcement experiments. To make the desired behavior habitual. The reason behind this is that the young adults get habitual of checking out the clicks, comments, and likes on their posts and this habit is further translated into smartphone addiction. Smartphone usage behavior as a series of ‗short duration, isolated, reward-based' (SIRB) sessions as opposed to other technological devices like tablets and laptops. In this sense, informational rewards reinforce the checking behavior ultimately, performing it out of habit. As smartphones give access to a broad variety of sources for seeking information, socializing and entertainment, the overall reward value of ―checking" habits increases as well.

Align with the results of the study literature revealed that smart phone addiction has increased to 87% among the university students in the past few years as a result of problematic mobile phone usage. Smartphone addiction leads to dependency on it on the part of users and they face problems connected to it (Hawi & Samaha, 2017). More than 69% of the students in throughout the world have been reported to be suffering from negative effect of Smartphone addiction (Szpakow, Stryzhak, & Prokopowicz, 2011). Thus, confirming Hypothesis 1 of the study.

Hypothesis 2 state that Males will score higher on fear of missing out, fear of positive and negative evaluation, problematic usage of mobile phone, and smart phone addiction in comparison to females. Results of the study confirmed the

Hypothesis 2 of the study indicating significant differences among the mean scores of male and female participants on study variables. Likewise, the most problematic applications are voice calls, text messages, and social networks. 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 was observed, involving text messages, voice conversations, and gaming applications. (Roberts et al., 2014). Male students were more likely to play games, watch mobile phone videos, and listen to music, whereas female students were more inclined to use the mobile phone communication functions and social networking services, (Roberts et al., 2014) revealed that males are more prone to smartphone addiction and FOMO because of their obsession with the smart phones and trending social media platforms. Also, indigenously males are more open in sharing their personal lives on social media platforms whereas female population has to face certain socio-cultural barriers. Females are found to be more protective about their social live, comparatively. Consequently, smart phone addiction and FOMO is more pronounced among the males as compare to females in the targeted population.

This indicates that in the current context, the trend of Smartphone use is higher among male students than female students. This trend could be attributed to the cultural influence where female access to mobile and Smartphone is restricted in many communities, and females are discouraged. Women have more tendency towards the social relationship, as a result, they spend pretty good time on using social network services such as Facebook, WhatsApp, Instagram, and other social networking which lead them eventually to get addicted to their smartphones. However, men are perceived to be more susceptible when it comes to online and offline gaming and programming than women. Male students were more likely to play games, watch mobile phone videos, and listen to music, whereas female students were more inclined to use the mobile phone communication functions and social networking services, (Roberts et al., 2014).

Hypothesis 3 state that adults will score higher on fear of missing out, fear of positive and negative evaluation, problematic usage of mobile phone, and smart phone addiction in comparison to late adolescents. Results of the study confirmed the Hypothesis 3, problematic smartphone use increasingly becomes more of a concern globally especially among young adults (Li, Niu, & Mei, 2017). Excessive use of

smartphone in young adults. Bulck (2020)study showed that the adults spend hours staying up at late night using social apps such as Face book, Instagram, Twitter, WhatsApp, and a variety of other communication tools before falling sleep. According to studies, 72 percent of adolescents feel compelled to respond to an incoming contact or message right away. This phenomenon can be attributed to the wrong interpersonal communication etiquette as well as low self-control and peer pressure. In the Internet addiction domain, find such negative but significant relation between adolescents' age and addiction level stating that this risky behavior is temporary in the adolescence period. This indicates that in the current context, the trend of Smartphone use is higher among adult students than early adolescences. The last two years, posting comments online (on a discussion group, website, blog, or photo site) has become more common among adults. People under the age of thirty are less inclined to leave online comments (Aaron & Kathryn, 2010). Thus, confirming Hypothesis 3 of the study.

Conclusion

Present study explores the relationship between fear of missing out, fear of positive evaluation, fear of negative evaluation and problematic smart phone usages. Employing the convenient sampling technique data was collected from 350 university students. Ages, gender, education level, models of mobile phones were taken as demographic variables. Keeping in consideration the smart phone addiction scale, this study also found the attitude of people smart phone addiction and internet addiction with aid of table t-test. Results of t-test revealed that there is a significance difference on fear of missing out. Correlation analysis indicated that fear of missing out is positively correlate with other study variables. Results of the t-test indicated that males had high on smart phone addiction as compare to female. Finding of the present study revealed that WhatsApp, snap chat and Instagram are the frequently used apps in comparison to others. Limitation and suggestions are further discussed.

Limitation and Suggestions

There are certain limitation of the study they may restrict generalizability of the findings and some suggestions for future studies to improve and develop further information in understanding the problematic mobile phone use and smart phone addiction

Participants of the present study were approached through convenient sampling from the area of Rawalpindi and Islamabad. Due to this sampling technique, only specific areas were targeted as this research is based on the sample of twin cities. Therefore it cannot be effectively generalized. For better generalized of the finding data can be collected from larger sample from different areas.

Moreover, use of self- report measure for assessing our constructs. Importantly, individuals are notorious for inaccurate time perception and inaccurately estimating time spent on their smartphones. And other limitation is, we measured media use only by way of a smartphone rather than from other devices. Additionally, our primary smartphone outcome variables were based on overall use rather than application- specific uses. Future researches could focus on problematic use of specific internet-based applications.

English language measures used in the present study language so the individual may have difficulty to comprehend the meaning in spite the synonym of

difficult words included in questionnaire. Moreover, uneducated sample was not included in the research therefore; studies should be conducted on such population as well. Further, research should be made to understand cultural differences as well.

Implications

Overall, this study serves to enhance the understanding of fear of missing out, fear of positive and negative evaluation and problematic smart phone usages. On the research line, the current investigation has a contribution to the literature of problematic smart phone usages as it confirmed and extended the role of fear of missing out and fears of positive and negative evaluation. The finding of the study has also practical implication for career counselors and policy maker. As the positive role of smart phone usages can be used to make intervention.

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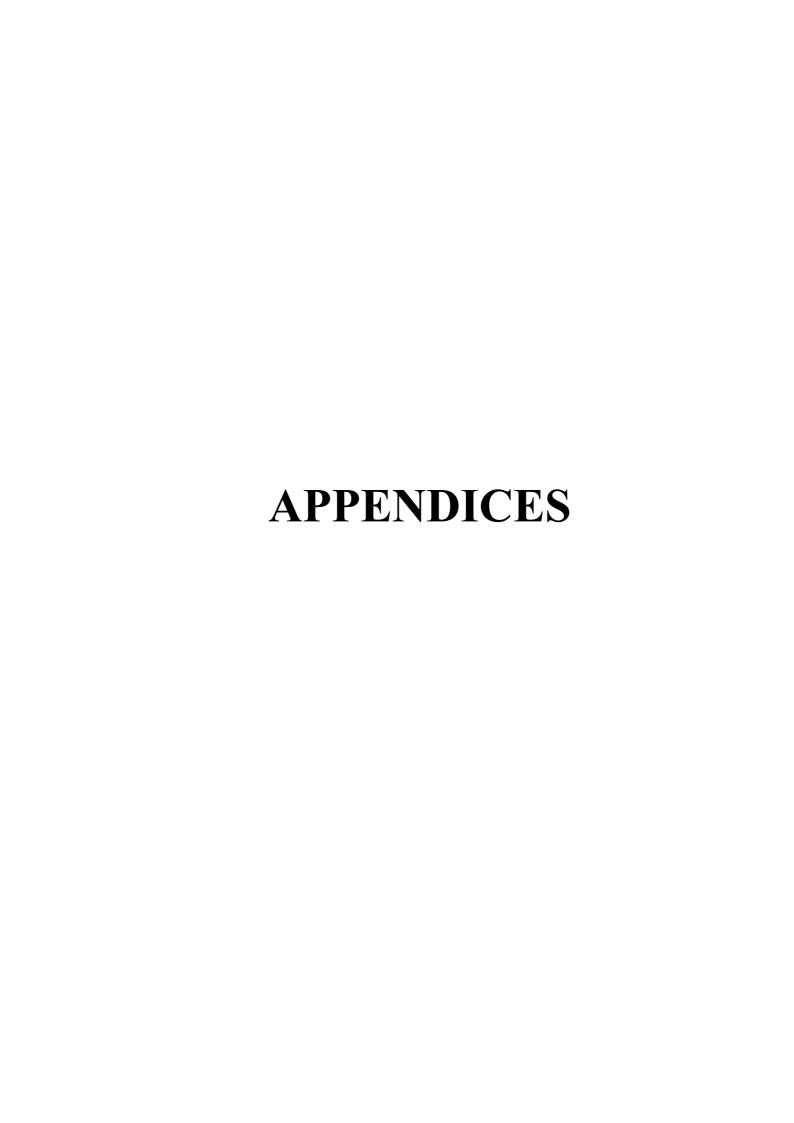
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APPENDICES

Informed consent

I am M.sc research student at National Institute of Psychology, Quaid I Azam University, and Islamabad. I am doing research which is required for partial fulfillment of my M.sc degree.

I request you to support my purpose and participate in this research project. I am trying to study problematic smart phone usage among university students along with …for this I am giving you a booklet based upon many questionnaire and demographic sheet. Respond to each in the light of your personal experiences. I assure you that personal information provided will be kept confidential and will only be used for research purpose. You have full right to withdraw at any stage of questionnaire administration. However, I will request to complete all measures once you volunteer to participate. There is no right and wrong answers. Kindly report your personal experience as honestly as possible. This will help me in achieving my research objectives. Please provide your consent through endorsing the signature in the prescribed space.

Your participation will be highly appreciated.

Signature …………………

Itrat Fatima

National institute of psychology

Itratfatima022@gmail.com

Demographic Information Sheet

1. Age _____
2. Gender _____
3. Education level _____
4. Semester_____
5. Department _____
6. Do you have your own smart phone?_____
7. Do you use your smart phone on daily basis?_____
8. Do you use your friends or any family member's cell phone on daily basis_____
9. For how long you have been using smart phone?_____
10. How often you use your smart phone in a day_____hours_____minutes.
11. Apps you frequently use:

    Facebook_____Twitter_____Watsap_____Stype_____Instagram_____
    _____Messenger_____

FoMO (Fear of Missing Out) Scale

Below are five statements that you may agree or disagree with. Using the scale below, indicate your agreement or disagreement with each item. Please be open and honest in your responding.

S.NO	Items	Not at all true	Slightly true of	Moderately true of me	Very true of	Extremely true
1	I get worried when I find out my friend are having fun without me					
2	It is important that I understand my friends" in jokes"					
3	I fear others have more rewarding experiences than me					
4	It bothers me when I miss an opportunity to meet up with friends					
5	When I go on vacation, I continue to keep tabs on what my friends are doing.					
6	When I have a good time it is important for me to share the details online (e.g. updating status).					
7	Sometimes, I wonder if I spend too much time keeping up with what is going on.					
8	When I miss out on a planned get together it bothers me					
9	I fear my friends have more					

	rewarding experiences than me.					
10	I get anxious when I don't know what my friends are up to.					

Fear of Positive Evaluation Scale

Read each of the following statements carefully and fill in a numbered bubble on the answer sheet to indicate the degree to which you feel the statement is characteristic of you, using the following scale. For each statement, respond as though it involves people that you do not know very well. Rate each situation from 0 to 9. Please fill in only one bubble for each statement.

S. no	Items	0 1 2 3 Not at all true	4 5 6 Somewhat true	7 8 9 Very true
1	I am uncomfortable exhibiting my talents to others, even if I think my talents will impress them			
2	It would make me anxious to receive a compliment from someone that I am attracted to.			
3	I try to choose clothes that will give people little impression of what I am like.			
4	I feel uneasy when I receive praise from authority figures.			
5	If I have something to say that I think a group will find interesting, I typically say it.			
6	I would rather receive a compliment from someone when that person and I were alone than when in the presence of others			
7	If I was doing something well in front			

	of others, I would wonder whether I was doing ''too well.''			
8	I generally feel uncomfortable when people give me compliments.			
9	I don't like to be noticed when I am in public places, even if I feel as though I am being admired.			
10	I often feel under-appreciated, and wish people would comment more on my positive qualities.			

Fear of Negative Evaluation

Please circle the number that best correspondent to how much you agree with each items.

s.no	Items	Not at all characteristic of me	A little characteristic of me	Somewhat characteristic of me	Very characteristic of me	Entirely characteristic of me
1	I worry about what other people will think of me even when I know it does not make any difference.	1	2	3	4	5
2	I am frequently afraid of other people noticing my shortcoming.	1	2	3	4	5
3	I am afraid that others will not approve of me	1	2	3	4	5
4	I am afraid that other people will find fault with me	1	2	3	4	5
5	When I am talking to someone, I worry about what they may be thinking about me.	1	2	3	4	5
6	I am usually worried about what kind of impression I make	1	2	3	4	5
7	Something I think I am too concerned with what other what other people think of me	1	2	3	4	5
8	I often worry that I will say or do wrong things.	1	2	3	4	5

Smart Phone Addiction Scale

S.no	Items	Strongly disagree	Disagree	Neutral	Strongly agree	Agree
1	Missing planned work due to smartphone use					
2	Having a hard time concentrating in class, while doing assignment, or while working due to smartphone use.					
3	Feeling pain in the wrist at the back of the neck while suing a smartphone					
4	Won't be able to stand not having a smartphone					
5	Feeling inpatient and fretful when I am not holding my smartphone					
6	Having my smartphone in my mind even when I am not using it					
7	I will never give up using my smartphone even when my daily life is already greatly affected by it.					
8	Constantly checking my smartphone so as not to miss conversations between other people on twitter or Facebook					
9	Using my smartphone longer than I had intended					
10	The people around me tell me that					

	I use my smartphone too much.					

Problematic Use of Mobile Phone Scale

Listed below are the statements that represent your opinions about your smart phone usage. Select the options that is best relevant to you

S.no	Items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	When I decrease the amount of time spent using my cell phone I feel less satisfied					
2	I need more time using my cell phone to feel satisfied than I used to need					
3	When I stop using my cell phone, I get moody and irritable					
4	It would be very difficult, emotionally, to give up my cell phone					
5	The amount of time I spend using my cell phone keeps me from doing other important work					
6	I have thought in the past that it is not normal to spend as much time using a cell phone as I do.					
7	I think I might be spending too much time using my cell phone.					
8	People tell me I spend too much time using my cell phone					
9	When I am not using my cell phone I am thinking about using it					

	or planning the next time I can use it.					
10	I feel anxious if have not received a call or message in sometime					
11	I have ignored the people I m with in order to use my cell phone.					
12	I have used my cell phone when I knew I should be doing work/ school work.					
13	I have used my cell phone when I knew I should be sleeping					
14	When I stop using my cell phone because it is interfering with my life, I usually return to it.					
15	I have gotten into trouble at work or school because of my cell phone use.					
16	At times, I find myself using my cell phone instead of spending time people who are important to me and want to spend time with me					
17	I have used my cell phone when I knew it was dangerous to do so					
18	I have almost caused an accident because of my cell phone use.					
19	My cell phone use has caused me problems in relationship.					
20	I have continued to use my cell phone even when someone asked					

	me to stop					

M Gmail

psychology photo state <psychologyphotostate@gmail.com>

Fwd: Author's permission for using study instrument
1 message

Itrat fatima <itratfatima022@gmail.com>
To: psychologyphotostate@gmail.com

Thu, Feb 3, 2022 at 12:41 AM

---------- Forwarded message ---------
From: **Valerie Gladwell** <V.Gladwell@uos.ac.uk>
Date: Sun, Nov 28, 2021 at 10:01 PM
Subject: Re: Author's permission for using study instrument
To: Itrat fatima <itratfatima022@gmail.com>
Cc: andy.przybylski@oii.ox.ac.uk <andy.przybylski@oii.ox.ac.uk>

Evening,

Please do feel free to use our FOMO scale.

Please see some additional information here:

https://osf.io/dch4v/files

Please let us know how you get on.

Best wishes
Valerie

****

Professor Valerie Gladwell (PhD, BMedSci)
Director of the Institute of Health and Wellbeing
University of Suffolk

From: Itrat fatima <itratfatima022@gmail.com>
Sent: 06 November 2021 15:08
To: Valerie Gladwell <V.Gladwell@UOS.AC.UK>
Subject: Author's permission for using study instrument

This email originated outside of the University of Suffolk. Unless you recognise the sender, and know the content is safe, do not click any links or open attachments.

6th November 2021
Respected Sir
I hope you are doing well.
My name is Itrat Fatima and I am a student of Msc Psychology at National Institute of Psychology, Qauid_i_ Azam University Islamabad, Pakistan.
I am going to conduct research on "fear of missing out, fear of positive and negative evaluation, problematic mobile phone uses and smartphone addiction " under the supervision of Ma'am Saira Khan. In connection with this research, I want to use the"Fear of Missing Out Scale ". Therefore I request your permission to use your well-established scale for my research.
I am looking forward to a favorable response from your side .thank you!
sincerely,
Itrat Fatima
MSC student National Institute of Psychology, Quaid-i-Azam University Islamab

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 Gmail   **psychology photo state <psychologyphotostate@gmail.com>**

Fwd: Author's permission for using study instrument
1 message

Itrat fatima <itratfatima022@gmail.com>   Thu, Feb 3, 2022 at 12:46 AM
To: psychologyphotostate@gmail.com

---------- Forwarded message ---------
From: **Itrat fatima** <itratfatima022@gmail.com>
Date: Wed, Nov 3, 2021 at 12:06 AM
Subject: Re: Author's permission for using study instrument
To: Greene,Lisa Merlo <lmerlo@ufl.edu>

thank you Maam

On Wed, Nov 3, 2021 at 12:02 AM Greene,Lisa Merlo <lmerlo@ufl.edu> wrote:

> Hello Itrat!
>
>   You have my permission to use the scale. It is attached. Good luck with your study.
>
> Best,
>
>
> **Lisa J. Merlo, Ph.D., M.P.E.**
>
> (Legal Name = Lisa Merlo Greene; she/her/hers)
>
> Director of Wellness Programs, UF College of Medicine
>
> Associate Professor of Psychiatry
>
> University of Florida
>
> 352-294-4932
>
> lmerlo@ufl.edu
>
> www.wellness.med.ufl.edu
>
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>
> NOTE: This communication may contain information that is legally protected from unauthorized disclosure. If you
> are not the intended recipient, please note that any dissemination, distribution or copying of this communication
> is strictly prohibited. If you have received this message in error, you should notify the sender immediately by
> telephone or by return email and delete this message from your computer.

From: Itrat fatima <itratfatima022@gmail.com>
Sent: Tuesday, November 02, 2021 2:23 PM
To: Greene,Lisa Merlo <lmerlo@UFL.EDU>
Subject: Author's permission for using study instrument

[External Email]

2nd November 2021

Respected Madam

I hope you are doing well.

My name is Itrat Fatima and I am a student of Msc Psychology at National Institute of Psychology, Qauid_i_ Azam University Islamabad, Pakistan.

I am going to conduct research on "fear of missing out, fear of positive and negative evaluation, problematic mobile phone uses and smartphone addiction " under the supervision of Ma'am Saira Khan. In connection with this research, I want to use the"Problematic Mobile Phone Uses Scale ". Therefore I request your permission to use your well-established scale for my research.

I am looking forward to a favorable response from your side .thank you!

sincerely,

Itrat Fatima

MSC student National Institute of Psychology, Quaid-i-Azam University Islamabad, Pakistan.

M Gmail   **psychology photo state <psychologyphotostate@gmail.com>**

Fwd: Author's permission for using study instrument

1 message

Itrat fatima <itratfatima022@gmail.com>   Thu, Feb 3, 2022 at 12:43 AM
To: psychologyphotostate@gmail.com

---------- Forwarded message ---------
From: **Itrat fatima** <itratfatima022@gmail.com>
Date: Wed, Nov 3, 2021 at 10:13 PM
Subject: Re: Author's permission for using study instrument
To: Mark Leary <leary@duke.edu>

thank you sir for your   permission

On Wed, Nov 3, 2021, 10:11 PM Mark Leary <leary@duke.edu> wrote:

> Hi Itrat.
>
> You may certainly use the Brief FNE Scale in your research. I've attached the original article in which it appeared.
>
> Best wishes,
> Mark Leary
>
> On 11/3/2021 12:35 PM, Itrat fatima wrote:
> > 3rd November 2021
> > Respected Sir
> > I hope you are doing well.
> > My name is Itrat Fatima and I am a student of Msc Psychology at National Institute of Psychology, Qauid_i_
> Azam University Islamabad, Pakistan.
> > I am going to conduct research on "fear of missing out, fear of positive and negative evaluation, problematic
> mobile phone uses and smartphone addiction " under the supervision of Ma'am Saira Khan. In connection with this
> research, I want to use the" Brief Fear of Negative Evaluation Scale ". Therefore I request your permission to use
> your well-established scale for my research.
> > I am looking forward to a favorable response from your side .thank you!
> > sincerely,
> > Itrat Fatima
> > MSC student National Institute of Psychology, Quaid-i-Azam University Islamabad, Pakistan.
>
> --
> Mark Leary
> Department of Psychology and Neuroscience
> Duke University
> Durham, NC 27708
> https://sites.duke.edu/leary/

M Gmail   **psychology photo state <psychologyphotostate@gmail.com>**

Fwd: RE: FW: Query regarding Smart Phone Addiction Scale
1 message

Itrat fatima <itratfatima022@gmail.com>   Thu, Feb 3, 2022 at 12:53 AM
To: psychologyphotostate@gmail.com

---------- Forwarded message ---------
From: **Saira Khan** <sairakhan@nip.edu.pk>
Date: Thu, Nov 4, 2021, 1:25 PM
Subject: Fwd: RE: FW: Query regarding Smart Phone Addiction Scale
To: Itrat fatima <itratfatima022@gmail.com>

--
Sent from myMail for Android

-------- Forwarded Message --------
From: Kwon Min 200032003@hanmail.net
To: Saira Khan sairakhan@nip.edu.pk
Date: Thursday, 04 November 2021, 07:05AM +05:00
Subject: RE: FW: Query regarding Smart Phone Addiction Scale

> Dear,
>
>
> I'm Min Kwon, first author of the SAS and SAS-SV.
>
> Thank you for the interest in Smartphone Addiction Scale.
>
> You can use my tools.
>
> The SAS consists of 33 questions and is grouped into six subscales, all weighted equally on a 6-point scale.
>
> The six subscales' scores are summed up to yield a total SAS score with a 33–198 range, where a higher score indicates more serious smartphone addiction.
>
> Cut-off of the SAS has not been proven yet, and you can do the comparison on the smartphone addiction severity.
>
> The SAS-SV consists of 10 questions without subscales, and all weighted equally on a 6-point scale. And the scale is cut-off value of 31 in boys and cut-off value of 33 in girls.
>
> I attach the material you ask me and you can review this information through to attach paper.
>
> Please let me know about the results of future studies.
>
> Good luck for your study and keep me posted of your progress.
>
> Best Regards,