

Personality Traits and Compulsive Use of Social Media Among YouthFarhan Ahmad Faiz¹, Tauheed Zahra^{*2}, Humaira Khalid³**Original Article**

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Abstract

The study aims to examine the role of personality traits in promoting compulsive use of smartphones; and affecting the social functioning, of university students. Total 300 students were selected from different private and government institutes of Lahore through Multistage sampling, Big Five Inventory-K (Beatrice Rammstedt, 2013), Smartphone Addiction Scale (Kwon et al., 2013), Social Functioning Questionnaire (Tyre et al., 2005), were administered respectively to explore the relationship in personality traits; compulsive use of smartphone and social functioning in young adults and how do they affect differently to male and female. In addition to that, Personality traits were examined to check their likelihood of predicting compulsive use of smartphones and social functioning in young adults. Pearson product-moment correlation revealed that Extraversion has a negative relationship with the compulsive use smartphones and a positive correlation with social functioning. Agreeableness and Conscientiousness have a positive correlation with the compulsive use of smartphones and social functioning. A negative correlation of Neuroticism and Openness with compulsive use of smartphone was found while there was a negative correlation in Neuroticism and individual's Social Functioning. Also, Social Functioning and Openness were found positively correlated. Men are more likely to use social media applications as compared to women. Moreover, a positive correlation between compulsive use of smartphone and social functioning was also observed. Multiple Hierarchal Regression also revealed that Openness was the strongest negative predictor of compulsive use of smartphones.

Keywords: Social Media, Smart Phone, Personality Traits, Youth, Technology, Generation, Compulsive, Adulthood, Phenomena, Categorical, Behavior

Introduction

Initially, businessmen were the only private consumers of mobile phone technology, and doing business was their primary priority. It progressively became more widespread in upper-middle and middle class households as well as they got more affordable and accessible, but it had never been as widespread as it is now, particularly among young adults. Their new name is "The Smart-Phone Generation" as a result. With the development of smartphone technology, the trend of young adults carrying a mobile phone significantly rose. A phone that could do similar functions to a personal computer, or even go a step beyond, was able to replace it in many respects. Long before we ever acknowledged it as a "actor" in the field of social science, it entered everyone's pockets, assumed a new role—that of a social-entity, and began influencing our lives. According to

a 2016 survey, there were close to 2.08 billion smartphone users worldwide, and smartphone penetration rates have been steadily rising.

1. It is crucial to remember that this global surge of technological advancement was followed by two profound transformations in the basic foundation of practically all societies:
2. Dramatic rise in young adults' smartphone usage.
3. The escalation and interconnectedness of social media and smartphone activity.

Both of these shifts are prevalent social phenomena that show how interdisciplinary the topic at hand is. We learned a lot from this study on the influences of personality on young smartphone users' social functioning.

Methodology

Survey research design was used and students from different private and government institutes of Lahore were provided with the survey questioner. The within group co-relational research design was used for this study. Multistage sampling strategy was adopted to select the participants. The sample size was 300 participants (Men= 149, Women= 151) which was determined through G-Power Analysis by keeping $p= 0.05$ with medium effect size was 150. The age range of the participants was 18- 35 ($M= 28.48$, $SD= 2.32$) because young adults are the most users of communication tools (Yellowless & Marks, 2007).

Individuals with Obsessive Compulsive Disorder on OCI-R (Obsessive Compulsive Inventory- R) with the score of 25.90 or more (APA, 2013); and Individuals who are required to use smartphone excessively because of professional purposes e.g., software engineers, journalists and those who belong to helping professions such as police officers and the workers of rescue 1122 were not included as participants.

The participants who were studying in the faculty of life sciences from different government and private universities of Lahore were approached including University of the Punjab ($n= 75$, $M= 37$, $W= 38$), University of Veterinary and Animal Sciences ($n= 75$, $M= 37$, $W= 38$), Forman Christian College University ($n= 75$, $M=38$, $W= 37$) and Minhaj University ($n= 75$, $M=37$, $W=38$). (Appendix A). Following hypotheses were tested for the current study.

H1: There is likely to be a relationship in personality traits, compulsive use of smartphone and social functioning in young adults.

H2: Personality traits are likely to predict compulsive use of smartphone and social functioning in young adults.

Personality Development during Young Adulthood

Personality Development is a topic that have fascinated social researchers for decades and even now when in our current social setting we observe patterns of behaviors which represent some sort of categoric division among people, we instantly make assumptions about their general traits on the bases of our past experiences. These assumptions no matter how articulated in their making, provide us with a brief but explicable glimpse of some underlying general principles which cooperate and derive these distinct sets of behavioral tendencies which in turn plays a vital role in shaping the personality of an individual.

Young Adulthood is the time period of significant changes in an individual's life. Transitions occur in this period from academic or professional to personal or love life. This is the time for personality elevation and relationship building; and no subsequent changes in personality traits occur after young adulthood (McCrae & John, 1992).

An early reference goes to social researcher Erik Erikson (1968) who categorized different age groups and their relevant attributes. In his work, he wrote about personality development period of adolescence and through early adulthood. And beside that he mentioned was a prolonged period of adolescence, present in industrialized societies, along with the psychosocial moratorium, available to the young people, due to which the young adult would likely to have a niche to fit in the society through role experimentation (Erikson, 1968). By doing this, Erikson had pointed out, though without naming, a time period which is in some sense can be described under the scope of adolescence together with adulthood, simultaneously, but not under any one of them. According to him, it was the age when commitments and responsibilities of adult life were held up and the experimentation with different role possibilities which were, initiated at the age of adolescence, continue to increase. Daniel Levinson (1978) has a similar contribution in the personality research. He interviewed men in their middle age, but he made them recall their past as well. On their account, he presented a theory which included personality development in teens in their twenties. He named the age between 17 and 33, at the early stage of personality development. He also made a point about the primary or dominant function of this development phase that he tends to become independent and carve out a stable life. During this phase, a young person searching through different possibilities in his/her love life and professional career, experiences enormous change and upheaval while exploring various opportunities about his private and professional life (Levinson, 1986).

These alterations coupled with the idea of young adults being such keen users of social media and smartphones, it is important to realize here that our young adults are getting particularly prone to experience compulsive or obsessive use of smartphones. It is worth mentioning here that "adults" in this research, are defined as being between the aged of 18 and 35 years. It is evident from the researches that young adults are at risk of severe mental health issues, as compared to other age groups (Potenza et al., 2010).

Theories of Personality Traits

The word 'personality' is derived from a Latin word 'persona' which literally means 'mask'. Personality is a dynamic organization of physical and psycho-social traits and attributes possessed by the individual which presents him as a unique character in the society. It consists of but not limited to the psycho-physical system that shapes the intrinsic patterns of characteristics in an individual such as, his thoughts, feelings, emotions and behaviors (Allport, 1962). It's more like a set of psychological traits which function within and for the individual, influencing his social and personal (or intrapsychic) interactions (Larsen & Buss, 2005). Following the same definition, Allport (1962) proposed his all-famous, Trait Theory of Personality.

Trait Theory

According to Allport (1937), trait or disposition is a kind of "generalized neuropsychic structure" (that is peculiar to the person possessing it), having the capacity to add constraints on various motivational factors, and other (equivalent) forms of adaptive behavior. Trait theory explains the filtration of human experience from the eyes of self in order to impose a personal stamp on the world. A simple example is of a trait-anxious person, who might find some stimuli as fearsome. In addition to that, traits produce consistency in a person's response while serving his

own adaptive and expressive desired goals. This view has been greatly admired by many social-cognitive theorists linked with personality psychology (Boyle et al., 2008).

Raymond Cattell's (1973) nomothetic approach samples a verity of independent variables, in order to have a deep look at personality. He started with life data that consist of information about an individual's everyday behaviors in natural settings. He then collected experimental data, recording person's response to experimental situations, and finally using questionnaire to get their response based on introspection or in other words, posing questions about their own feelings and behavior. With this, Cattell (1973) was able to generated sixteen dimensions of personality traits by doing factor analysis. These traits were: "Abstractedness, warmth, apprehension, emotional stability, liveliness, openness to change, perfectionism, privateness, intelligence, rule consciousness, tension, sensitivity, social boldness, self-reliance, vigilance, and dominance" (Larsen & Buss, 2005).

Another most influential name in the domain of personality studies is of Freud (1923). By distinguishing three types of personality namely; id, ego and superego he not only describes the internal functioning of human psychology but also the social implications of their different states. He sees "Id" as a relatively crude part of our psyche that strive for immediate satisfaction from pleasure seeking stimuli. Super Ego is defined as a sense of acceptance toward social constraints or normative behavior. It incorporates conformity with existing values, norms morals of the society, learned and internalized during socialization. Ego is a sense, developed to mediate between both these counterparts or the unrealistic Id and Super-Ego as a decision maker (Mcleaod, 2010).

Eysenck's Model of Personality

Eysenck (1981) introduced the theory of personality which he based upon two-dimensional plain containing Extraversion-Introversion and Neuroticism-Stability vertexes. According to him, highly extraverted people are more sociable and outgoing, hence craving excitement in the presence of others. On the other hand, people that are more introverted are quiet and introspective; who prefer to spend time alone, being cautious about planning their future. Highly neurotic people are more moody, anxious and vulnerable. On the contrary, those who are quite low on Neuroticism are calm, stable, and even-tempered. Furthermore, he observed the super-traits of Extraversion and Neuroticism, independent of each other, and argued that differences in personalities result from these two super-traits. People, with higher level of Neuroticism and Extraversion tend to have quite different traits than those, who score low in both. So, highly extraverted and neurotic people tend to have more touchy and aggressive kind of attitude, whereas people with higher level of Extraversion and low on Neuroticism are more inclined toward being carefree and sociable. Moreover, People having a high score of Psychoticism have been described as being more 'egocentric, impersonal, aggressive, cold, lacking in empathy and impulsive (Eysenck, 1981).

Big Five Personality Theory

Researches have confirmed a five-factor personality detection tool to assess five major factors which can me distinguished as Extraversion, Agreeableness, Conscientiousness, Openness and Neuroticism. It is important to mention that similar treatment is given here to Extraversion and Neuroticism as Eysenck did. Other traits like, openness to experience/intellect accounts for receptivity to new experiences. People who scores low on this trait tend to have more familiar, practical and concrete kind of attributes. Those which are open to new experiences, are more curious with high power of imagination. Agreeableness is a measure of people's trust,

generosity and care for others. Those who score low on Agreeableness hold antagonistic and possess tough-minded qualities. Conscientiousness deals with organization and with achievements. People possessing this trait are hard-working, competent and organized. Others, with low in terms of Conscientiousness are easy-going, lacking self-discipline and comparatively less goal-oriented (Digman, 1990; Goldberg, 1993).

Our research took start from the view point of personality theories in order to examine the effects of compulsive behavior, as personality theories give huge emphases on personality trait and its relationship with compulsive behavior because personality has far reaching implications on human behavior (Higgins, 2000). Ehrenberg et al., (2008) described that personality traits are also a grand predictor of compulsive use of smartphone so there is also a link between personality traits and compulsive smartphone use tendencies (Ehrenberg et al., 2008).

Compulsive Use of Smartphones

In last few decades, phones have made a quick journey from being simple voice communication tools to a sophisticated network of wireless mobile devices, called, “smartphones”. This event of technological morphogenesis, in the life of a telephone has transformed the nature of its further use and abuse. The presence of various useful applications revolutionized the whole concept of carrying a phone, as it was no longer remained a phone, but a highly sophisticated gadget whose implications could go far beyond just arranging communications. Some of them even have health implications like heartbeat, sleep or exercise monitoring. Technological advancements changed or in some cases, replaced our desires with necessities and we started to rely upon such newly emerged features more and more; features that were considered mere extras in the beginning. Slowly and gradually we started to depend upon these, creating a need for future innovation without analyzing its dimensions and consequences. Their complex and useful functionality has played a vital role in making their users dependent (Leung, 2008). As a result, the use of smartphones has become inevitable.

However, despite of all these positive considerations, the possibility of becoming a prevalent social problem is still there and if looked closely, is almost growing. For example, there are different aspects of data security related with “free to use” smartphone applications if downloaded free of cost, can gain access to almost every information stored on that phone, which most people just simply ignore. Apart from that the linkage of smartphones with various social media platforms on the internet, has changed the whole concept of social relationships because now they (social relationships) are:

1. Easy to approach and frequently accessible.
2. Requires a consistent source (social media platforms) for the reinforcement or growth of their newly emerged revitalizing nature.

And because smartphone work like a bridge that helps to connect people with these social media platforms (sources); and by doing this, it immediately acquires the role of an actor in the network of social relationships because it has no longer remained just a machine, but a mean of social connectivity. So, in this sense there is a possibility that people who are using smartphones frequently than other people may or may not be addicted to smartphone itself but to their higher tendency of participating in social activities, especially where there is an option available for remote participation, before people like Introverts, who like to have social relationships without actually going for a hangout. But regardless of any reason, it is confirmed through a lot of previous studies that as far as there is a smartphone which is being frequently used, it has a potential to create conditions which support negative characteristics like, facing difficulty in the performance of

daily activities; impulse control disorders and many other symptoms which effect social functioning of the individual.

Compulsive Behavior

By definition, it is “a response to an uncontrollable drive or desire to obtain, use, or experience a feeling, substance, or activity that leads the individual to repetitively engage in behavior that will ultimately cause harm to the individual and/or others” (O’Guinn and Faber, 1989). Other main features include a clear pattern of recurring and irrational conduct (Parylak, Koob, & Zorrilla, 2011).

Because smartphones are able to access rewards like social networking and communication more quickly, they compel their users to get updates, more frequently. Keeping the mobile phones checked over and over again for latest social updates or for some other addictive use, is regarded as compulsive behavior. Another study shows that it becomes difficult for people to control the duration of their smartphone usage (Bianchi & Phillips, 2005). Theories also suggest that the need for touch is also a form of compulsive behavior which is likely to be one of the characteristic of the individuals who use smartphone compulsively. Frequent users show signs such as: “preoccupation with the phone, increasing amounts of time spent using the phone in order to achieve the same level of satisfaction, repeated, unsuccessful efforts to control, cut back, or stop the use; feelings of restlessness when attempting to reduce the use; jeopardizing significant relationships, jobs, or educational or career opportunities because of phone use; and using the phone as a way to relieve a dysphonic mood” (Takao, Takashi & Kitamura, 2009). Applications has a major contribution in keeping their user engaged more frequently or for a long period of time.

Smartphone Habits and Internet Addiction

Behavior that results from unconscious stimuli or without thinking is called habit (La Rose & Eastin, 2004). Repeated acts can cause habits (Oulasvirta, Rattenbury, Ma & Raita, 2011). Habits have their own pros and cons, depending upon situations. Some of them are quite useful as they help to reduce our thinking process and make us more efficient in our routine tasks. They also provide us with clues to predict people’s behavior, making social relationships easier to fulfill (Oulasvirta et al., 2011; Wood & Neal, 2007). Similarly, they have got some negative effects too. Causing unwanted activities which has the capacity to produce short-term or long-term negative impact.

Likewise, the excessive use of smartphone has a huge potential to cause compulsive behaviors, which can range from panic attacks in case of phone being inaccessible to the urge for its frequent checking without a good reason. There is a slight difference between the compulsion of smartphones and the addiction of internet as the former is basically a source of providing gratification through interpersonal communication like calls, messages, or social media updates, whereas the later is more like having a craze of information in general such as entertainment, shopping or educational purposes. Researchers have discovered that people are more attached to their mobile phones than other similar devices like computers or tablets which shows the relatively importance is being given to those features and services, which neither tablets nor computers can offer (Carbonell, Oberst, and Beranuy, 2013).

Smartphone Usage VS Age Group

Age is one of the factors that predicts compulsive use of smartphone. Old people are less likely to adopt new technologies than their young ones. Besides that, when it comes to internet, youngsters are not so concerned about money making or its professional use, instead they are more inclined towards other pleasure-seeking activities; and they are more interested in social

participating remote social activities, available on social media because they want to socialize to explore new opportunities (Howe & Strauss, 2004). As they become more dependent on digital communication, they are more likely to show addictive behavior than people who belong to other age groups. Researches shows that people in their late adulthood, score higher on emotional intelligence which make them relatively stable in emotional affairs (Mayer et al., 1999). Moreover, youngsters are more vulnerable to conditions of social stress which means they have to face conflicts in social relationships more often, so their social functioning can be widely effected (Brune & Clarke, 2006).

Young adults are more prone to using smartphones compulsively in Pakistan, where 77% of smartphone users are between the ages of 21 and 30; 12% are between the ages of 31 and 40; 9% are between the ages of 10 and 19; and only 1% are over the age of 40 ("Smartphone usage in Pakistan", 2014).

Social Functioning

By definition, social functioning is a "normative behavior in a social situation". It is important for an individual to have the ability to show normative behavior because social acceptance and individual's perception about his social acceptance, are both positively correlated (correlated) and crucial in improving his social functioning. Therefore individual's frequent disconnection from his social setting not only impair his social functioning but also reduce the inflow of important information that is necessary to hold social relationships together.

Social Role Theory

The theory of Social Role enjoys a similar status in the field of social science as the concept of Social Functioning does in Social Work. In general, the Social Functioning approach seek to explain the current condition of a client's social behavior with regards to his social role, with an intention to reform his behavior according to social expectation to earn him a positive feedback from the society (Blakely & Dziadosz, 2003). Social Role Theory provides base that helps to develop successful intervention plan in order to improve client's adaptation skills and better his overall social functioning. Here the term adaptation refers as a person's ability to initiate proper response according to societal expectations attached to his role. It is important to mention here that the reformation of behavior that improves social functioning is not forced on the clients by the clinicians, instead, the program enables clients to seek for an appropriate alternative on their own (Blakely, 2003).

Smartphone and Social Life

Apart from social applications, economic and informative purposes smartphones have other features of personal use like clock, colander, calculator, voice and video recorder, music player, navigation and much more but its non-technological attributes also play a key role in one's social life. It also serves as a kind of Identity for its user. Such use is not because of the device itself but the name of its manufacturer which takes the concept of keeping a phone much further from its technological existence toward an instrument of social status; a trait of high culture; an expression of belonging with a specific class or with a reference group, thus causing unnecessary usage in general public with the desire to showcase one's social attributes which is a widely seen social phenomena. This appealing characteristic of phone can help create new relationships and gain respect, approval or gratitude from others.

Findings

Correlation with demographic variables revealed that as the age increases compulsive use of smartphone decreases. As people get older they spend less time on their smartphone. Extraverts have less likelihood of compulsive use of smartphone and they have better social

functioning. Young adults with more Agreeableness and Conscientiousness are more likely to use smartphone compulsively and their social functioning is appropriate. Those young adults, high in Neuroticism, are less likely to use smartphone compulsively and their social functioning is poor. High Openness accounts for less compulsive use of smartphone and better social functioning. Agreeableness and Openness are strong negative predictors while Conscientiousness is strong positive predictor of compulsive use of smartphone. Neuroticism is a negative predictor of social functioning and compulsive use of smartphone is a positive predictor of social functioning. The independent sample t-test revealed that women men are less likely to use their smartphone compulsively than men but yet, men have better social functioning than women.

Table 3.2

Frequencies and percentages of Education, Hobby, Company Preference, Purpose of Smartphone and Importance of Smartphone Use in Young Men and Women.

Demographic variables	Men		Women	
	<i>f</i>	%	<i>f</i>	%
Education				
Bachelors	108	72.48	119	78.80
Masters	18	12.08	12	7.94
M. phil	18	12.08	18	11.92
Ph. D	2	1.4	1	.66
Hobby				
Book Reading	43	28.85	53	35.09
Cooking	4	2.8	7	4.63
Sports & Games	29	19.46	6	3.97
Art & Painting	7	4.6	10	6.62
Movies/ T.V/ Music	33	22.14	40	26.49
Internet Surfing	9	6.04	7	4.63
Social Media	7	4.69	5	3.31
Company Preference				
Apple	46	30.87	32	21.19
Huawei	10	6.71	13	8.60
Nokia	11	7.38	13	8.60
Samsung	55	36.91	75	49.66
Sony and Q mobile	5	3.35	12	7.94
HTC	7	4.69	1	.66
LG and Motorola	5	3.35	6	3.97
Purpose of Smartphone				
PDF Books	10	6.71	9	5.96
Facebook & Social Media	47	31.54	43	28.47
Calling	21	14.09	28	18.54
Texting	25	16.77	36	23.84
Internet Surfing	33	22.14	12	7.94
Pictures & Selfies	7	4.69	1	.66
Importance of Smartphone				
Social Connection	74	49.66	89	58.94
Keeps up-to-date	13	8.72	8	5.29
Helpful in Academics	4	2.68	14	9.27
Entertainment	15	10.06	10	6.62
No Importance	4	2.68	9	5.96

Note: N=300 (Men=149, Women= 151)

The frequencies and percentages of demographic variables like education of the participant, hobby of the participant, smartphone company preference, purpose of smartphone and importance of smartphone can be seen in Table 3.2.

Table 3.3

Summary of Intercorrelations, Mean and Standard Deviations for Scores on Personality Traits, Compulsive use of Smartphone, Social Functioning, Impulsiveness and Materialism in Young Adults

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	M
1. Age	-	.04	-.17**	-	-	.02	.07	.04	.02	-.01	-.06	-.03	-	-.04	-	.00	21.48
2. F. mem		-	.79**	.00	.06	.13*	.01	.04	-.09	.04	-.03	.01	.04	-.08	.00	-.02	7.48
3. E. mem			-	.11	-	.13*	-.00	.00	-.03	.01	.02	-.02	.00	-	-	-.03	2.28
4. Inc				-	.01	.14*	.02	-.04	.05	-.13*	.08	.11	-.00	-.08	-	.09	1214 34
5. Av. Time					-	-.05	-.00	.02	-.03	-.05	.17**	.02	.07	-.01	.16	.07	6.84
6. Extra.						-	.22**	.23**	-	.17**	-.01	.12*	-.09	-.04	.04	-	11.37
7. Agree.							-	.16**	-	.05	.02	.14**	.07	.05	.21	.01	11.20
8. Cons.								-	-	.36**	.07	.21**	.12*	.23**	.16	-.07	14.68
9. Neur.									-	.17**	-	-.05	-	-.07	-	.04	11.41
10. Open										-	-.04	.13*	.03	.09	.07	-.11*	8.01
11. C.use											-	.16**	.34**	.14*	.31	.36**	31.65
12. S. fun												-	.18**	.12*	.32	.18**	9.41
13. M. Imp.													-	.08	.44	.26**	10.88
14. N..Imp.														-	.09	-.06	11.57
15. A. Imp.															-	.33**	55.86
16. Mater.																-	

Note: N= 300, F. mem= total no. of family members, E. mem= total no. of earning members in family, Inc.=Monthly income of family, Average time= Av. time of using smartphone, Extra. = Extraversion, Agree. = Agreeableness, Cons. = Conscientiousness, C. use= Compulsive use of smartphone, S. fun= Social Functioning, M.Imp= Motor Impulsiveness, N. Imp= Non Planning Impulsiveness, A. Imp= Attention Impulsiveness, Mater. = Materialism. *p<.05, **p<.01

According to Table 3.3 It was hypothesized that (1) There is a likelihood that Compulsive Use of Smartphone is positively correlated with the personality trait of Extroversion and with social functioning (2) There is a likelihood that Compulsive Use of Smartphone is positively correlated with Agreeableness and Neuroticism (3) There is likely be a negative relationship of Conscientiousness and Openness with compulsive use of smartphone (4) High Agreeableness

and Neuroticism is likely to have negative relationship with social functioning and (5) Conscientiousness and Openness will likely to have positive relationship with social functioning. The correlational analysis from inferential statistics is available in table 3.3.

Correlation with demographic variables revealed that as the age increases compulsive use of smartphone decreases. As people get older they spend less time on their smartphone. Extraverts have less likelihood of compulsive use of smartphone and they have better social functioning. The finding also confirmed a past research illustrating that men make use of Facebook more often to expand their social network with considerable ease than women (Mazman & Kosak, 2011). On the whole, the gender difference can be explained by their role expectations. This shows that men are likely to take more risk than women (Helgeson, 1994) hence, they are keen to meet strangers on the internet. Furthermore, where women are considered of holding more interpersonal inclinations, but tend to express more privacy issues or identity exposure when go online (Fogel & Nehmad, 2009) and therefore they prefer interaction with those they are already familiar with and whom they trust. Such results can also be explained by the cultural norms of Pakistan that are concerned with women's identity disclosure and sometimes don not allow them to do so.

It was hypothesized in the current study that Extraversion is likely to have positive relationship with compulsive use of smartphone and social functioning in young adults. And the results showed that Extraversion is likely to have negative relationship with compulsive use of smartphone which is in contradiction to hypothesis. First of all, a recent study that suggests extraverts are more active on social media and enjoy social networking but don't spend as much time on technology devices like laptops and smartphones as introverts do can be used to support the findings (Kashdan, Jarden et al., 2015). Additionally, extraverts enjoy forming relationships by meeting people and attending events, which may account for this (Watson & Clark, 1997) therefore they stick less to their smartphones. In the collective culture like Pakistan there is a trend of meeting with relatives, and extraverts follow this norm more frequently so there is less likelihood of smartphone use in extraverts. Results showed that higher Extraversion accounts for the better social functioning which is consistent with Big Five theory (Costa & McCrae, 2004). In the light of this theory it can be inferred that extraverts like to go out interacting people and they are energetic which lead them function appropriately in their daily life.

The other hypothesis of the study stated that Agreeableness and Neuroticism are likely to have positive relationship with compulsive use of smartphone. The current study showed that Agreeableness is positively correlated with compulsive use of smartphone. This finding is consistent with the hypothesis and a previous study by (Lane and Manner, 2013) which suggests that more agreeable individuals use smartphone excessively. This is true because people who score high in the trait of Agreeableness also score high in interpersonal skills level (Scealy, Phillips, & Stevenson, 2002). Hence, it can be argued that people high in Agreeableness trait are more friendly in nature, they have better communication and social skill therefore, the likelihood of communication tools such as smartphone is high in them.

The significant positive correlation between Agreeableness and social functioning is evident from the present study. Another study suggests that agreeable people's friendly behavior prevents conflicts because other people behave more positively with them (Asendorpf & Wilpers, 1998). (Barrick, 2001) found out in his study that agreeable people are competent show good performance in jobs which involve extensive interpersonal skills (Barrick, Mount, & Judge, 2001). It also goes with the finding of current study as the friendly nature of the people with high

Agreeableness accounts for better social functioning. Islam is the prevalent religion of our society which has been considered a perfect guideline for grooming of an individual's personality. Hence, the individuals with more Agreeableness interact to other people with loving attitude, they do not go for conflicts in their relationships and all these characteristics can help enhance their social functioning.

Results also revealed negative correlation between Neuroticism and compulsive use of smartphone. This finding contradicted the hypothesis and is consistent with a study by (Deveraj et al., 2008) which suggests that Neurotic's mind processes make them less admirable to new technology and therefore they tend to show a relatively negative attitude toward smartphone (Devaraj et al., 2008). The result is also consistent with a study by Bianchi and Phillip which explains that Neurotics find mobile phones less appealing (Bianchi and Phillip, 2005). It can be inferred under the light of these researches that the people with high Neuroticism are emotionally instable, they feel tensed while communicating to others therefore, there is a less tendency of compulsive use of smartphone in them.

The results of the study also indicated a significant negative correlation between Neuroticism and social functioning which is harmonious with the previous work of (Gunther et al., 1999) which indicates that individuals with high Neuroticism, compared to the individuals with low Neuroticism experience more interpersonal stressors and are more reactive towards daily life stressors (Gunther et al., 1999). The people high in Neuroticism are more likely to be anxious and so they cannot perform well which may keep them dissatisfied from their job (Smith et al., 1983). This may lead them to function inappropriately in their daily life routine therefore, they may be social inadequate.

The current study revealed a weak positive correlation between Conscientiousness and compulsive use of smartphone which contradicts the hypothesis that Conscientiousness is likely to have a negative relationship with compulsive use of smartphone. People who are high in Conscientiousness spend less time on smartphone (Mowen, 2000; Rocas, Sagiv, Schwartz, & Knafo, 2002). However, the result of present study is in contradiction to it which is may be because according to (Costa and McCrae, 1992), high level of Conscientiousness accounts for more competent, responsible, and orderly personality (Costa & McCrae, 1992) so they might use more smartphone to keep in touch with the outside world and to get new information (Tidwell and Sias, 2005). Under the light of these arguments it can be suggested that being more vigilant and organized conscientious people are more prone towards compulsive use of smartphone.

The other finding shows that Conscientiousness is likely to have positive correlation with social functioning which is consistent with the hypothesis and previous literature that models of Conscientiousness include competence (the capability to do something successfully or efficiently), order (the disposition of things in relation to each other according to a particular sequence, pattern, or method), dutifulness (motivated and encouraged by a sense of duty), achievement-striving (working with commitment for the higher goals), self-discipline (the tenacity to control one's feelings and overcoming the weaknesses), deliberation (the careful contemplation), organization (the sense of being organized and disciplined), diligence (persistent effort), perfectionism (a disposition to regard anything short of perfection as unacceptable), and prudence (knowing the way to avoid distress) (Costa & McCrae, 1992; Lee & Ashton, 2004). All these facets are linked with better social functioning and social competence of the individual.

The present study indicates the negative correlation between Openness and compulsive use of smartphone which is consistent with the hypothesis and the previous study by Ehrenberg (2008), according to which Openness has negative correlation with compulsive mobile phone using tendencies (Ehrenberg et al., 2008). It was indicated by (Chitteranjan et al., 2011) that people who score high in Openness are comparatively more likely to possess traits like being imaginative artistic, original and bit curious in nature. This is why they are attracted towards the beep of text message or call but they are less likely to waste their time on smartphone because they have more productive interests (Chitteranjan et al., 2011). The people high in Openness are more imaginative and deep thinker, they consider using phone is time wastage.

The results also showed the positive correlation between Openness and social functioning which can be explained by the model of personality-intelligence interface that postulates that people with high levels of Openness engage more in artistic and intellectual activities such as drawing, painting, writing, reading and photography that provide learning opportunities and this engagement improves skills to interact with people (Chamorro-Premuzic and Furnham, 2004). As they need to interact to new people for earning and refining their intellectual and artistic capabilities.

The results of the current study revealed that the young adults who use smartphone compulsively have better social functioning. The result is harmonious with the previous finding by (Rosen, 2005) who investigated that smartphone has made life easy for the people; it is the best source of communication and social interaction which allows people to interact in different dimensions and enhance their capabilities (Rosen, 2005). It can be said that smartphone is the source of better social interaction in interpersonal relationships and there is a wide range of activities to do in the form of applications which may lead an individual to deal with the society in an elegant way.

Furthermore, it was hypothesized that personality traits are likely to be the predictors of compulsive use of smartphone and social functioning. The study revealed that among all the five traits of personality such as Extraversion, Agreeableness, Conscientiousness, Neuroticism and openness; Neuroticism is the strong negative predictor of social functioning. The reason behind it can be the fact that the people with high Neuroticism are emotionally instable and they overreact to the simple situations for nothing therefore they are afraid of going out, establishing communication and maintaining it is difficult for them (Graziano, 1996) which can lead them to suffer socially and may have impaired social functioning.

Conclusion

Compulsive use of smartphones has dramatically increased within the last few years and young adult population is their biggest consumer. The product comes with its own negative and positive impacts which varies among people belonging to different personalities and demographics. Personality traits of the individual predict the use smartphone in both productive and destructive ways. Those who have flexibility in their personality and behaviors know well how to use a smartphone and have better social functioning and vice versa. However, there are no thresholds on long term consequences of frequent smartphone usage with regards to any of this personality trait holder because apart from these independent variables, there are some other uncontrollable factors which intervenes in such a way that has the potential to make anyone, a smart phone addict, regardless of his psychic attributes. So, it is important to mention here that this study gives us a brief but deep insight about the course of technological advancement which is to say that technology has deep imprints on human behavior and the way in which new technology is being developed, has a key contribution in determining the future of human behavior along with

all its negative or positive; short-term and long-term impacts. It is therefore necessary to determine the right course of development in order to ensure its safe and more efficient use. In this regard, a further research is needed to explore the course of a healthy and human friendly dimension of development of the smartphone and software industry; because, as the old saying goes, "prevention is better than cure".

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