

An Over View of Smart-Phone in The Ring of Big Neo Five-Factors of Personality

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ABSTRACT: *The technology in today's time is growing like weed in our society. As, this unwanted plant grows everywhere rapidly, exactly in the same way, technology has grown and has undertaken almost all areas of human life. Be it professional, personal or the personality of an individual, technology has shaped our mind and behaviour. The handy technology and easy gratification from social networking sites and software has persuaded our thoughts and concept without our conscious awareness. Thus, in the present research paper, researchers have focused on the most common technology of time – smart-phone and its pros and cons with respect to personality. The concept of personality is not new in psychology, rather it is one of the oldest phenomena know to psychologist. Personality has been defined in numerous ways by various psychologists and philosophers in all ages. One of the oldest and widely accepted definitions of personality is given by Gordon Allport in 1937. According to him, "Personality is the dynamic organization within the individual of those psychophysical systems that determine his unique adjustments to the environment." Similarly, one of the most comprehensive theories of personality is Five-Factor Model of Personality given by Robert McCrae and Paul Costa in 1978. Therefore, in the present paper, researchers will focus on big five dimensions of personality with reference to smart-phone. This paper incorporates the changes and reason behind those changes which were considered while describing personality after smart-phone. Thus, this paper is an attempt to understand personality and its dimensions in broader spectrum in today's scenario.*

KEYWORDS: *Personality factors; Smart-phone; Addiction; Social networking sites.*

INTRODUCTION

The term personality has always been a fascination for general public. It is used in various sense, it can be used to equate the social skills, appearances, effectiveness to elicit positive response from people etc. Originally, personality is derived from the Latin word 'persona' meaning 'the mask', used by the stage actors in the theatres for changing the facial make-up to depict the particular role in certain manner. Thus, in general word, personality is the physical or external appearance of an individual or how someone carries oneself. In terms of psychology, personality is the way of responding to any individual or situation in a certain way. Personality is the unique and stable combination of qualities that characterize an individual's behaviour in different situations. Thus, the personality of an individual comprises of both physical as well as psychological qualities, the expression or the elicit behaviour is unique to individual, and the personality of an individual is dynamic in nature, that is, the physical and

psychological features of an individual does not change and stay stable over time but internal and external demands may result in change as adaption to situations. Personality has been defined in numerous ways by various psychologists and philosophers in all ages. One of the oldest definitions of personality is given by Gordon Allport in 1937. According to him, "Personality is the dynamic organization within the individual of those psychophysical systems that determine his unique adjustments to the environment." The history of personality can be traced back to the times of great scholars such as Hippocrates defining personality by enlisting four biles or fluids (humors) based on four temperaments namely choleric temperament (yellow bile), melancholic temperament (black bile), sanguine temperament (red blood), and phlegmatic temperament (white phlegm); Plato proposing four groupings as artistic, sensible, intuitive, and reasoning; and Aristotle defined personality in terms of four factors, they are iconic i.e, artistic, pistic i.e, common sense, noetic i.e, intuitive, and dianoetic i.e, logic. After that, the tradition of clinical observation (psychodynamic) begins with work of Freud, Jung, and McDougall influencing the

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stems from behavioural, humanistic, and trait perspective. The striking development of contemporary concept of personality winged up with the explanation of Gordon Allport (1937, 1961) followed by Boring (1950) and Sanford (1963, 1985). Thus, no one explanation of personality can be adopted or generalized because it is still difficult to assess personality scientifically and there are various approaches and perspectives concerning same (Friedman, et al. 2016).

The influence of the various perspectives has been particularly strong on the model of Big five factors of personality. The big five factor approach or the lexical tradition begins with an analysis of traits adjectives found in languages. This model steam out of the extensive work of R. B. Cattell and is an inductive approach to personality, which means that it is research driven and the theory is emerged from the data. Theorist like Cattell and Norman proposed the list of thousands of adjectives which comprehensively define the personality of individuals. By factors analysing ratings on all these adjectives, some 18000 adjectives were extracted and the theorist argued that each adjective uncover the structure of personality traits themselves (Hall, et al. 1957). Through series of studies, these researches led to the identification of Five Factors of personality. Many theorists gave their own verdicts of five factors such as Donald Fiske, Tupes and Christal, Warren Norman and finally the one which is most widely accepted till date was given by Paul Costa and Robert McCrae. They identified big five structure by analysing personality question than descriptive terms. They identified Openness to experience, Conscientiousness, Extraversion, Agreeableness, and Neuroticism which can be sum-up in a meaningful mnemonic popularly known as OCEAN. These five factors carry six specific facets within them, for example, the six underlying facets for extraversion are warmth, gregariousness, assertiveness, activity, excitement seeking, and positive emotions. The person who scores high on extraversion will display these characteristics, whereas the person scoring low will be stated as introvert in nature (Ciccarelli, et al. 2010) Similarly, other four factors carry their own facets and the opposite characteristics as presented in table 1.

To assess and to operationalize the five-factor model of personality, the NEO- PI-R was developed. These five

factors represent the most basic dimension underlying the traits and are discussed below.

OPENNESS TO EXPERIENCE: Openness to experience comprises of active imagination, aesthetic sensitivity, attentiveness to inner feelings, preferences for variety, intellectual curiosity, and independence of judgement. People high on O are open to both inner as well as outer worlds and their life is experientially rich. They are keener on divergent thinking which contribute to creativity, acceptance of novel ideas and entraining unconventional values. On the other hand, people low on O are more conventional and conservative. They prefer familiar ideas and have narrow scope, also they don't elicit emotions as open people do.

CONSCIENTIOUSNESS: Over the course of time, most people learn to manage their impulses. Conscientiousness comprises of active process of self-controlling, planning, organizing, and carrying out task. Conscientious people are cautious, dependable, organized, and responsible. They are purposeful, strong-willed, determined and competitive which helps them with the academic and occupational achievements. On the negative side, it may lead to annoying fastidiousness, compulsive neatness or workaholic behaviour. Low scorers are not lacking in moral principles but are impulsive, careless, disorganized, disobeying, and undependable.

EXTRAVERSION: Extraverts are sociable and prefer large groups and gatherings. They are assertive, active, talkative cheerful, energetic, optimistic, and they seek excitement and stimulation. Whereas, introverts are reserved, independent, shy, submissive and quite. They prefer to be alone and some of them suffer from social anxiety.

AGREEABLENESS: It is a dimension of interpersonal tendencies. Agreeable people are friendly, cooperative, trusting, warm, and altruistic. They easily sympathise with people and are always willing to help. On the other hand, people low on this dimension are antagonistic, egocentric, sceptical, cold and unkind.

NEUROTICISM: It can be also addressed as emotionally unstable. The platter of neuroticism serves maladjustment, fear, sadness, embarrassment, anger, guilt and disgust. People

Table 1.
Five factors and their opposite characteristics.

| The Big Five Factors (OCEAN) | | |
|---|-------------------|---|
| High Score Characteristics | Factors (OCEAN) | Low Score Characteristics |
| Creative, Artistic, Curious, Imaginative, and Nonconforming | Openness | Conventional, Down-to-Earth, and Uncreative |
| Organized, Reliable, Neat, and Ambitious | Conscientiousness | Unreliable, Lazy, Careless, Negligent, and Spontaneous |
| Talkative, Optimistic, Sociable, and Affectionate | Extraversion | Reserved, Comfortable being Alone, and Stays in Background |
| Good-Natured, Trusting, and Helpful | Agreeableness | Rude, Uncooperative, Irritable, Aggressive, and Competitive |
| Worrying, Insecure, Anxious, and Temperamental | Neuroticism | Calm, Secure, Relaxed, and Stable |

high on N are prone to irrational ideas, poor self-control, lack of control over impulsivity, and poor coping mechanisms due to disruptive emotional interference. They are tending to be nervous, tensed and may suffer from neuroses. People scoring low on this dimension are emotionally stable, calm, contented, relaxed and even-tempered.

The Five Factor and its assessment NEO-PI-R is not the only tool to assess the personality, there are various other tools which fulfil the requirements of the researchers respectively. It is one of the many tools which are used world-wide by the researchers to measure and for interpretation the personality. It shows excellent level of internal consistency and test-retest reliability ranging from .86 to .92 with good predictable validity. It used in various settings like vocational counselling, clinical settings, and industrial/organizational settings

The concept of personality was defined when the ways of communication were different from now, and the ways of interactions varied from individual to individual. People earlier used to communicate face to face or they used to write to each other which made the analyses of personality easier. Non-verbal cues, actions and use of words and vocabulary were easy to interpret but in today's time the most innovative invention – smart-phone has changed the lives of people, and with time it is getting smarter. The smart-phone is the upgraded version of cell-phone which was invented in 1980's by Martin Cooper and the first smart-phone was launched in year 1992. A smart-phone is cellular device with internet accessibility, which makes them mini or portable software with integrated computers. They are easy to carry and are user friendly in term and conditions providing various features at one click like web browsing, text messaging, social networking sites, and news and entertainment apps making them more likeable. At one point smart-phone has transformed lives of people due to easier and faster communication but on the other point it leads to much disturbance in everyone's life. Now, people prefer online relationships and conversation which makes them more deceptive in nature thus, revealing very little about their personality. Over time many researchers have argued that personality does define how people use these technologies and for what purposes. There are various ends to the use of smart-phones; it can be used as mode of interpersonal communication, education, entertainment, and gambling. Internet connections and availability of numerous sources has made easy for people to approach to various games including games played on computers and casinos. The games on smart-phone have given handy access to the people of all ages to experience and to develop interest in the potential gambling resulting in addiction (Phillips, et al. 2006). conducted a study entitled as "personality and self-reported use of mobile for games". The results of the study revealed that people who scored low on agreeableness used mobile phones to play games than people who were high on agreeableness. The findings showed the interplay of

personality traits and excessive or problematic use of smart-phone leading to severe addiction such as gambling.

A blog (shortening of "weblog") is an online diary or instructive site showing data in the converse sequential request, with the most recent posts showing up first. It is where an essayist or even a gathering of journalists share their perspectives on an individual subject. A blog is a conversation or instructive site distributed on the World Wide Web comprising of discrete, frequently casual journal style text passages. Not all people around the world prefer sharing their perspective with others, and also, not everyone who writes the blogs are same in person as they appear on blogs. Thus, creating deception and opaque reality between the audience and the blogger. (Guadango, et al. 2008) in their study under the title as "who blogs? Personality predictors of blogging" stated that people who are high in openness to experience and high in neuroticism are more likely to be bloggers. Also, they discussed the relationship between neuroticism and gender was moderate, specifying that women who are high in neuroticism are more likely to be the bloggers than men. The study indicated the impact of personality factors on the use of internet or smart-phones.

The big five factors of personality define the personality comprehensively resulting in clear picture of each factors and facets. People high on agreeableness are tend to be friendly and warm and prefer to be more with people, whereas, people low on this dimension are egocentric and cold resulting in avoiding much contact with people. The results of the study "personality and self-esteem as predictors of young people's technology use" conducted by (Ehrenbeg, et al. 2008) revealed that people low in agreeableness and with low self-esteem spent more time on calls, whereas people high in extraversion and neuroticism were reported to be addictive to text messaging apps. This study high lights the core of the factors where extraversion is sociable and prefer large groups and gatherings thus implying more on text messaging apps where he/she can be in contact with many people at a time. As come to neuroticism, being emotionally unstable, they are anxious and prone to worry and avoid direct calls where he or she is subjected to embarrassment, therefore, relying on text message where he/she can analyse the conversation carefully (Devaraj, et al. 2008) conducted a study "How does personality matter? Relating the five-factor model to technology acceptance and use". The results revealed that the five-factor model of personality is useful to predict the attitude, belief and intentions of the users. They stated that the intention to use the technology and the technology acceptance depends on the personality of an individual as well as the individual differences. People high on conscientiousness focus more on intentions and usefulness, whereas, people who scored high on extraversion and agreeableness pay more attention to subjective norms. Neuroticism is negatively associated with perceived usefulness and openness to experience is positively associated with perceived usefulness of the technology.

(Lane, et al. 2013) studied the direct “impact of personality traits on smart-phone ownership and use”. The researcher studied 312 participants ranging from 18 to 77 years. The result was analysed using logistic regression and hierarchical regression. The findings of the study stated that extravert individuals are more likely to own a smart phone and place greater importance on texting through smart-phone. Also, people falling under agreeableness showed interest in calling rather than texting functions of smart-phone. They also found significant difference in smart- phone ownership and use by gender, age, education and ethnicity. (Stachl et al. 2017) conducted the study on “personality traits predict smart-phone usage” and demonstrated that individual differences on terms of personality can be used effectively in predicting the use of smart-phone among people. The results stated that extraversion is predictor of increased use of applications such as calls, photography, and communication including social networking sites. Agreeableness indicated to be the predictor usage of apps such as calls and transportation and was negatively associated with games and other various apps. Conscientiousness was negatively associated with gaming and entertainment apps comprehensively defining the notion of people who are more focused on their tasks. No significant relationship was found between openness to experience and use of smart-phone, whereas neuroticism predicted the frequency of calls and use of communication apps. Thus, concluding the study in favour of personality as predictor of smart-phone usage. Not only the personality defines how and why the people with different personalities use the features of smart-phone but it also gives researchers an idea about the acceptance of smart-phone and how helpful smart-phones are in light of individual differences and personality. (Ozbek, et al. 2014) studied “the impact of personality on technology acceptance: a study on smart-phone users” and stated that people who score high on agreeableness perceive smart-phone as more useful, whereas, people with high level of neuroticism perceive smart-phone as less useful. Also, people high on openness to experience find smart-phone easy to use technology. Overall, they highlighted the individual differences in light of personality traits and how it influences the use and acceptance of technology (smart-phone). It also throws light on the behavioural addiction called nomophobia that is the fear of losing and being without one’s smart-phone. There are certain types of people who feel more anxious in the absence of their phone than others, even when almost all the features and working of software is same and similar. (Roberts, et al. 2015) in their study entitled as “I need my smart-phone: A hierarchical model of personality and cell-phone addiction” found that neuroticism and extraversion are positively related with cell-phone addiction. Conscientiousness is partially correlated to attention impulsiveness and cell-phone addiction. Openness to experience was negatively correlated with attention impulsiveness and no relation was found among agreeableness and other correlates. Therefore, concluding that personality traits do exert impact on the

users of cell- phone in terms of use and addiction.

In a study “smart-phone addiction and associated psychological factors” conducted by (Pearson, et al. 2016) revealed that narcissism, openness to experience and neuroticism were linked to smart-phone addiction. Also, it stated that smart-phone encourages narcissism tendencies in users who are addicted to social networking sites. (Kim, et al. 2016) studied the “personality factors predicting smart-phone addiction predisposition: behavioural inhibition and activation systems, impulsivity and self- control”. The results showed that females are more prone to get smart-phone addicted than males. People who have weak or low self-control are also prone to smart-phone addiction. They stated that people who are addicted to smart-phone show signs of dysfunctional impulsivity. The results of the study significantly supported personality traits as predictors of smart-phone addiction among the sample.

DISCUSSION

The present paper sought to identify the impact of personality on smart-phone use and its acceptance among people. Taken together the results of the studies used as literature to support the idea of how and to what extent the big five factors of personality are relevant in the cyber-time we live in and how they impact the choice of apps and other features in smart-phone, the table 2 gives a glance of which personality factor influence the feature of smart- phone.

In consistent with results on personality research it is clear that big five factors of personality are related to the applications, use and acceptance of smart-phone technology. It adequately supports the most important notion of personality psychology that individual differences have a significant impact even when it comes to the technologies. Concentrating on big five factors of personality these results can be justified with the facets that accompany the factors all the way long. The big five factors of personality, openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism popularly known as OCEAN shows evidence of impacting the choices and preferences of people in technologies especially smart-phones.

People high on the dimension openness to experience are more intended to blog, be on social networking sites and try more apps to entertainments than others. These individuals are open to new experiences, have curiosity, imagination and good self-expression. They enjoy new activities and are more attentive to inner as well external feelings of themselves. Blogging is a creative form of self-expression; social networking sites provides various new varieties of experiences and entertainment apps like YouTube satisfy their intellectual curiosity. Therefore, it can be stated that people high on this dimension can be good bloggers, can use various social networking sites simultaneously and enjoy different activities. People low on conscientiousness are attracted to gaming and entertainment apps. People scoring

Table 2.
Personality factor influence the feature of smart-phone.

| The Big Five Factors and Smart-phone | | | | | |
|---|-----------------|--------------------------|---------------------|----------------------|--------------------|
| | Openness | Conscientiousness | Extraversion | Agreeableness | Neuroticism |
| Gaming | | Low | | Low | |
| Blogging | High | | | | High |
| Calls | | | | High | |
| Text Messaging | | | High | | High |
| Photography | | | High | | |
| Social | High | | High | | |
| Networking | | | | | |

high on this dimension are the individual who participate in active planning, organizing and managing the task. They are goal oriented and competitive in nature. Therefore, people low on conscientiousness get easily distracted with games and entertainment available on click. Also, people who are at the middle of the rope of conscientiousness are also subjected to impulsivity and addiction to smart-phone. Due to the easy availability of all the functions and handy user-friendly work, many people manage their lives with the help of smart-phone making it an integral part of living resulting in addiction and impulsivity among people scoring average in this dimension.

Individuals who score high on extraversion tend to use their smart-phone for text messaging apps, photography, and social networking sites. The general scenes of extraverts are that they are sociable and prefer large gatherings and groups. They are assertive, active, cheerful, energetic, optimistic, and talkative and seek excitement and stimulation. The text messaging apps and social networking sites such as facebook, instagram etc, provide them with the instant social gathering and large groups. These apps also help these individuals to share various self-portraying materials such as photographs and videos resulting in likes and appreciation from people. Constant use of these apps and satisfaction that they provide to extraverts makes them addictive to smart-phone. Agreeable people are sympathetic, warm, and fundamentally altruistic which is why they use calling apps and reservation apps in their smart-phone. They are low on gaming and can be addictive to smart-phone due to continuous use of calling apps. People high on neuroticism are tend use their smart-phone for blogging and text messaging as these apps provide them gratification for their emotional instability. Also people high on this dimension are impulsive and addictive to smart-phones.

CONCLUSION

Personality is the unique combination of characteristics which help individuals to adapt and adjust in their surroundings. Every individual reacts or respond different in the given situation because of the differences in personality. There are various approaches and theories which explain the human personality from different perspectives and there are also, various assessment tools which help psychologist

and scholars to understand the human nature and their personality. One of the many models, big five factor model of personality is widely used as a platform to understand the personality and is relevant till date. In the above paper we discussed how these five factors and their facets explain the personality of individual in world and working of technologies or more specifically smart-phone. Thus, we can conclude that the five-factor model of personality – OCEAN explain the individual differences in the virtual space of smart-phone to great extent.

The implications of the paper are that it gives a clear idea of how personality affects the use and acceptance of technologies especially smart-phones. It waves the path for other researches to be done on more specific topics concerning the newest behavioural addiction – nomophobia. Also, it states the link between the personality factors and the use of smart- phone, which could help individual to train them to get over the addiction and impulsivity attached to the devices.

As every research has their limitations, so is ours, the first limitation of the paper is that, it is a theoretical perspective, therefore is subjected to researcher’s views on the situation. Secondly, only big five factor model of personality was taken in light, whereas, there are other personality factors such as narcissism, dependable personality, people suffering from borderline personality disorder etc, which influence the use of technologies especially smart-phone in completely different manner. Also, the discussion was done as general but further specific discussion may rule out dealing with special population for

example students or elderly. This piece of research is a comprehensive overview of personality and smart-phones, hence opening paths for other researchers. Smart-phone has created a completely new industry. Everyday these companies launch better and smarter phones to win the competition but they do not come with the safety instruction against the addiction and dependability which these devices bring along with them. Therefore, more intense and scientific researchers are needed to understand the pros and cons of these smart devices in our life. Personality being the most important and major aspect of individual influences the use of these devices. Thus, adding a piece of research.

DECLARATIONS

The author declare no potential conflicts of interest with respect to the research, authorship and/or publication of this article.

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