

Personality Traits and Mobile Phone Addiction among Adolescents: A correlational study

Abstract

Background: Mobile phones in this technological era have become an integral part of day to day lives. Mobile phones are social enablers and help individuals to stay connected in intimate ways. **Aims:** The present paper investigated relationship between Personality Traits and Mobile Phone addiction. **Sample:** Purposive Sampling was done. **Methods:** The sample comprised of 100 adolescents (Mean Age= 15.53 years, S.D. = 1.733). The tools used for data collection were Big Five Inventory (Goldberg, 1992) and Mobile Phone Addiction Scale (Dr. A. Velayudhan & Dr. S. Srividya, 2010). **Statistical Analysis:** Descriptive Statistics and correlational analysis were done. Result: Results pointed out significant positive relationship between Extraversion, Neuroticism and Mobile Phone Addiction. **Conclusion:** The present study was undertaken to explore the relationship between Big five personality traits and Mobile phone addiction and it can be concluded that there is positive relationship between Extraversion, Neuroticism and Mobile Phone Addiction

Keywords: Extraversion, Neuroticism, Big Five Personality Traits and Mobile Phone Addiction

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Introduction

Mobile Addiction is a compulsive over use of mobile device, usually quantified as the number of time user access their devices or total amount of time they are online over a specified period. Mobile phones are social enablers and help individuals to stay connected in intimate ways. It acts as a window to external world and allows individual to do activities which could not be done freely in cultural context. The 65% of individuals born post 1990 have access to mobile phones out of which 70% are of grade ten to bachelor education-

nal level (webforum.org.agenda/2019). The prevalence of problematic mobile phone use was found to be 6.3% in the overall population (6.1% among boys and 6.5% among girls) and 16% among the adolescents (Sahu, Gandhi & Sharma, 2019). The mobile phone addiction is similar to psychopathology of traditional substance use disorders. The symptomatic criterion in proposed diagnostic criteria states that recurrent failure to resist the impulse of using the mobile phone (Lin et al., 2016). Indian teens are currently driving Smartphone's market in India. The age group

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of 16-18 years using Smartphone's have shown a rapid rise from 5% in 2012-25% in early 2014 (Katz & Aakhus., 2002). Rapid digital adoption is creating a Mobile First ecosystem. Adolescents are using technology for gratification which includes self development, wider exposure, user friendliness, relaxation, career opportunities and global exchange. Adolescents under 15 years of age are also affected, in India and around the world. The high rate of mobile phone use among Indian adolescents indicates that this area needs to be explored, with a focus on what roles technology plays in fostering fantasies, acting out behaviours. (Davey & Davey, 2014). Addictive use of gaming was present for 39 adolescents (19.5%); addictive use of mobile/cell phone was present in 31 adolescents (15.5%) and addictive usage of Internet was present among 36 (18%) of them. It was associated with difficulties in various daily activities such as academics, sports, meeting friends, socializing and emotional difficulties. (Rajanna, Sharma & Palanichamy, 2016). Big Five Factors of Personality includes Openness to experience which reflects the degree of intellectual curiosity, creativity and a preference for novelty and variety, Conscientiousness which refers to the tendency to be organized and dependable, show self-discipline, act dutifully, aim for achievement, and prefer planned rather than spontaneous behavior, Extraversion means Energy, positive emotions, assertiveness, sociability and the tendency to seek stimulation in the company of others, and talkativeness. Butt & Phillips (2008) reported that extraverts use mobile phones as a means of stimulation. Agreeableness refers to the tendency to be compassionate and cooperative rather than suspicious and people scoring less on agreeability were found to be spending more time in texting and mobile conversations. Neuroticism traits means to be prone to psychological stress and also to experience unpleasant emotions easily, such as anger, anxiety, depression, and vulnerability. Behavioural Addictions are feelings of 'Tension' or 'Stimulation' before committing the act and pleasure, gratification or relief at the time of committing the act. The highest

level of problematic mobile phone use is most found among adolescent users, from which it can be argued that this kind of addiction is most likely to occur among this group (Bianchi and Phillips, 2005). Mobile provides us integrated services such as voice communication, messaging, management applications and wireless communication capability, instant news, online gaming, online shopping, social networking and web browsing. Addiction can cause harm to both individuals and the society. Feeling uncomfortable and irritated when mobile phone is not accessible are some of the characteristics for Mobile phone addiction (Park, 2005). Roberts, Pullig, and Manolis (2015) investigated the correlation between personality characteristics and mobile phone addiction. They found that introversion was negatively associated, while emotional instability (neuroticism) and materialism were positively associated with mobile phone addiction. In another study, Takao (2014) examined the relationship between "Big Five personality traits" and problematic mobile phone use. Results showed that problematic mobile phone use was related to neuroticism, extraversion, and openness to new experience, whereas it was not related to agreeableness and conscientiousness. Mobile addiction is also associated with Extraversion & Anxiety (Hong, Chiu, & Huang, 2012). Arpaci & Unver (2020) suggested a positively significant relationship between neuroticism (emotional imbalance) and Smartphone addiction for women and conscientiousness was negatively related with Smartphone addiction for women. Further, there was a negatively significant relationship between agreeableness and Smartphone addiction for both genders. Panda and Jain (2018) explored the relationship between personality characteristics and compulsive Smartphone use. Their results suggested that extraversion and conscientiousness were positively correlated, whereas openness to new experiences, agreeableness, and neuroticism were negatively correlated with compulsive Smartphone use. In all these studies except one, a consensus result is that Smartphone addiction is positively correlated

with neuroticism but negatively correlated with introversion. The past decade was full of researches on Mobile Phone Addiction as this breakthrough in technology has changed every sphere of human lives living and communicating in virtual reality, instant communication are sort of gratifying behaviour. Personality is crucial in describing the behaviour of an individual. The present study aims to examine what personality traits are related to mobile phone addiction.

RQ: What is the relationship between Big Five Personality traits and Mobile Phone Addiction among adolescents?

Objectives

- To study the relationship between Extraversion and Mobile Phone Addiction.
- To study the relationship between Agreeableness and Mobile Phone Addiction.
- To study the relationship between Conscientiousness and Mobile Phone Addiction.
- To study the relationship between Neuroticism and Mobile Phone Addiction.
- To study the relationship between Openness to Experience and Mobile Phone Addiction.

Hypothesis

- H0: There is no relationship between Extraversion and Mobile Phone Addiction.
- H1: There is no relationship between Agreeableness and Mobile Phone Addiction.
- H2: There is no relationship between Conscientiousness and Mobile Phone Addiction.
- H3: There is no relationship between Neuroticism and Mobile Phone Addiction.
- H4: There is no relationship between Openness to Experience and Mobile Phone Addiction.

Sample: The sample comprised of 100 adolescents (Mean Age= 15.53 years, S.D. = 1.733, 50% male & 50% females) of age ranging between 13-18 years students from grade 10 to 12 from various schools of Haryana regions owing a Mobile phone with internet pack comprised as sample for the study.

Design: Correlational Design

Tools Used: The Big Five Inventory (BFI): The Big Five Inventory (BFI) is a self-report inventory having 44-item five-point scale (1: "strongly disagree"; 5: "strongly agree") developed by John & Srivastva, 1999. It is quite brief for a multidimensional personality inventory (44 items total), and consists of short phrases with relatively accessible vocabulary. The scale has five dimensions including "openness," "agreeableness," "conscientiousness," "extraversion," and "neuroticism." Reliability coefficients of the subscales ranged from .70 to .77. The high scores represent high openness, agreeableness, conscientiousness, extraversion and neuroticism.

Mobile Phone Addiction Scale: The Mobile phone addiction scale designed by Dr. A. Velayudhan & Dr. S. Srividya (2010) It contains 37 items used five point response format it is five point Likert scale. The score of the scale ranged from 37-245. The higher the score higher the mobile phone addiction. The alpha (test retest) reliability of the scale was found to 0.79 and the split half reliability index was found to be 0.75. The internal consistency reliability was found to be 0.89.

Procedure: The students were contacted in their free classes and lunch break in school with due permission from Principal. Students who use mobile phone for more than one hour a day were selected and asked to fill Big Five Inventory and The Mobile phone addiction scale and the raw data was collected. Oral consent was taken from students.

Results and Discussion

The Table 1 indicates the mean and standard

deviation scores of Age, Extraversion, Agreeableness, Conscientiousness, Neuroticism, Openness to experience Personality Traits and Mobile phone addiction. Table 2 indicates the relationship between extraversion and mobile phone addiction ($r = .501^{**}$) was found to be significantly positive relationship at 0.01 level. Bianchi & Phillips

(2005) also reported the same that problem use was a function of age, extraversion and low self-esteem. Extraverts personality are more likely to take risks, the study supported community concerns about mobile phone use, and identifies groups that should be targeted in any intervention campaigns. Lane & Manner (2011) *found that extraverted individuals were*

Table 1

Table showing Mean and S.D for Big Five Personality Traits and Mobile Phone Addiction

VARIABLES	N	MEAN	S.D
Extraversion	100	16.39	5.70
Agreeableness	100	13.43	4.34
Conscientiousness	100	16.85	4.04
Neuroticism	100	16.76	4.73
Openness to experience	100	13.95	4.26
Mobile phone addiction	100	78.75	6.32

Table 2

Table showing Correlation among Big Five Personality Traits and Mobile Phone Addiction

VARIABLES	Extraversion	Agreeableness	Conscientiousness	Neuroticism	Openness to Experience	Mobile phone addiction
Extraversion	1	.026	-.159	.638**	.071	.501**
		.793	.111	.000	.480	.000
Agreeableness		1	.048	.030	.563**	-.044
			.630	.761	.000	.661
Conscientiousness			1	-.058	.220*	-.071
				.565	.026	.477
Neuroticism				1	.041	.746**
					.686	.000
Openness to Experience					1	-.080
						.426
Mobile Phone Addiction						1

**significant at 0.01 level

*significant at 0.05 level

more likely to own a smart phone and extraverts reported a greater importance on the texting function of smart phones and agreeable individuals place greater importance on using the smart phone to make calls and less importance on texting. The relationship between agreeableness and mobile phone addiction ($r = -.044$) was not found to be significant. The relationship between conscientiousness and mobile phone addiction ($r = -.071$) was not found to be significant. Hao et. al., (2019) in the study conducted on Chinese undergraduate students found conscientiousness exhibited negative relationship with insomnia and interfered sleep quality and the overuses of mobile phones. The r value for neuroticism and mobile phone addiction ($r = .746^{**}$) was found to be significant at 0.01 level. (Gao et al., 2017) found that neurotic people tend to have mobile phone addiction. Marciano, Camerini, & Schulz (2020) after Meta analyzing 159 studies reported that high levels of neuroticism significantly correlated with all measures of problematic Internet activities, with medium size correlations. The relationship between openness to experience and mobile phone addiction ($r = -.080$) was not found to be significant which is contradictory to Luria (2018) study where a negative correlation was found between openness to experience and mobile phone addiction while driving.

Conclusion

The H0 hypothesis is rejected on the basis of result as significant positive relationship was found between extraversion and mobile phone addiction. The H1, H2, H4 were accepted as the result were supporting these hypothesis. The H3 hypothesis is rejected as significant positive relationship was found between neuroticism and mobile phone addiction. It is concluded that Extraversion and Neuroticism Personality traits have positive relationship with Mobile Phone Addiction.

Implications

The present study offers insight in understanding

the personality traits of individuals linked to mobile phone addiction and helps in understanding individual differences and individual with what personality traits are prone and not prone to mobile phone addiction.

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