

Research Paper

The Effects of Adolescent Mobile Phone Addiction and Personality on Their Psychological Well-Being in India

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ABSTRACT

Background: The use of smartphones and other mobile devices has a negative impact on people's mental health. The purpose of this research was to find out how mobile phone addiction and personality affect the psychological wellbeing of adolescents. **Method:** A survey design and a convenient sampling technique were used to collect data. The overall sample consists of 101 adolescents (29 males and 72 females) ages ranging from 12 to 18 and attending both Government and Matriculation schools in Karur District, Tamil Nadu, and India. To determine the significant difference and relationship between variables, the independent sample t-test and product-moment correlation were used. **Results:** Adolescents' psychological well-being and mobile addiction vary greatly by gender, age, and school. Adolescent personalities are not considerably different by gender, age, or type of school. Addiction to mobile phones has a detrimental effect on adolescent psychological well-being. **Conclusion:** Addiction to mobile phones has a detrimental effect on the psychological well-being of adolescents. The increase in mobile phone addiction has resulted in a decline in psychological well-being.

Keywords: *Mobile-phone addiction, personality, psychological well-being, Adolescents*

Psychological well-being is a vital component of mental health since it comprises both hedonic (pleasure, enjoyment) and eudaimonic (meaning, fulfilment) happiness, as well as resilience (coping, emotion regulation, healthy problem solving). Understanding the underlying mechanisms underlying this concept and designing successful training programmes can help increase psychological well-being. Addiction is defined as a person's inability to control an object or behaviour in conjunction with a desire to live without it. When the term "addiction" is mentioned, it is frequently associated with substances such as alcohol or cigarettes. Other varieties of addiction, on the other hand, emerge in response to certain things, people, or situations (Shain, 2018; Soner & Yilmaz, 2018; Aygar Bakir & Uzun, 2018). Mobile phones have become an increasingly important part of people's lives in today's society. It enables users to transmit their sentiments,

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thoughts, chosen identity, and self-presentation on a greater scale, with the risk of developing a mobile phone dependence or addiction. As a result, mobile phones can assist us in striking a balance between our social and personal lives, while excessive use may interfere with ongoing responsibilities (Cutrell, Czerwinski, & Horvitz, 2001; Kushlev, Proulx, & Dunn, 2016). One of the most hazardous outcomes of mobile phone use is the possibility of developing behavioural addictions. Individuals who are addicted to a particular behaviour are unable to abstain from it and may experience tension and unrest as a result of the ban (Grant et al., 2010). While teenagers and young adults mostly use their phones for pleasure, adults in their thirties and forties rely on them to manage their work calendars and other business-related responsibilities (Kim et al., 2014). Forgy, Hyman, and Schreiber (2014) conducted a study on mobile phone etiquette for individuals of all ages and genders. They discovered significant differences in how mobile phones are seen as suitable in a variety of social situations across age groups and genders. Male participants, for example, believed that making and responding to phone calls was acceptable in all social circumstances, whereas female participants did not. Seniors and females have been found to be less inclined to use mobile phones in constrained social situations. Pervin and Cervone (2010) describe personality as "a unique and persistent set of feelings, thoughts, and behaviours that characterise an individual." Extraversion traits influence the number and intensity of interpersonal interactions (Mowen 2000). Individuals that are extraverted are more positive and active, as well as more involved in social groups and activities (Watson and Clark 1997). Finally, neuroticism is characterised by depressive, anxious, vindictive, emotional, embarrassing, insecure, and fearful sentiments (Pawlowska et al., 2014). Individuals who score strongly on this dimension report having more bad life experiences as a result of their proclivity to put themselves in adverse situations (Emmons, Diener, and Larsen 1985). While cellphones provide numerous benefits to young people's lives, they also have the ability to interrupt their social relationships and complicate their lives by preventing them from advancing academically, thus harming their psychological well-being. This study sought to ascertain the effect of adolescent mobile phone addiction on their psychological well-being.

METHODOLOGY

Participants

The study sample includes 101 adolescents (29 males and 72 females) aged 12 to 18 years; 43.6 percent of the adolescents are between the ages of 12 and 15 years, and 56.4 percent are between the ages of 16 and 18. 50 (49.5%) adolescents attended a government school, 50 (49.5%) adolescents attended a matriculation school, and 1 (1%) adolescent attended a CBSE school. Adolescents come from a variety of backgrounds, with 43.6 percent from rural backgrounds, 30.7 percent from urban backgrounds, and 25.7 percent from suburban backgrounds. 67.3 percent of adolescents are raised in nuclear families, while 32.7 percent are raised in joint family structures.

Measures

The Psychological Well-Being Scale devised by Sisodia and Choudhary (2012) is used to measure participants' psychological well-being. It includes 50 items that assess five dimensions (subscales) of well-being: life satisfaction, efficiency, sociability, mental health, and interpersonal relationships. A high score suggests a high level of psychological well-being. For the normative sample, the internal consistency reliability coefficient is .90, while the test-retest reliability is .87. The Eysenck Personality Inventory (EPI) measures two unique, independent dimensions of personality: extraversion-introversion and neuroticism-

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stability, which account for most personality variances. Each form contains 57 "Yes-No" items that do not repeat. When a falsification scale is present, it is possible to detect answer distortion. The attributes evaluated include extraversion, introversion, and neuroticism. The Mobile Phone Addiction Scale (MPAS) established by Velayudhan and Srividya (2012) was used to measure mobile phone usage patterns and levels of addiction. The six-factor scale contains 37 components, 34 of which are positive and three of which are negative. The scale's scores ranged from 37 to 245.

RESULTS

The statistical significance of the data was determined using IBM SPSS version 22.

Table-1: Gender differences in adolescents' psychological well-being, mobile phone addiction, and personality.

Variables	Gender	N	Mean	Std. Deviation	t-test for Equality of Means					
					t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Psychological Well being	Female	72	201.250	23.4171	2.511	99	.014	13.4569	2.8225	24.0913
	Male	29	187.793	26.6289	2.376	46.384	.022	13.4569	2.0607	24.8531
Mobile phone addiction	Female	72	90.556	24.8652	-2.607	99	.011	-13.0651	-23.0105	-3.1198
	Male	29	103.621	16.3869	-3.093	77.671	.003	-13.0651	-21.4761	-4.6541
Personality	Female	72	30.181	3.8977	.937	99	.351	.7668	-.8576	2.3912
	Male	29	29.414	3.2350	1.014	61.961	.315	.7668	-.7449	2.2785

An independent sample t-test revealed a significant difference in male and female adolescents' psychological well-being, $t(46.384) = 2.38, p < 0.05, 95\% C.I. (2.0607-24.8531)$. Male adolescents have higher levels of psychological well-being ($M=187.793, SD=26.6289$) than female adolescents ($M=201.250, SD=23.4171$). There is a significant difference in the level of mobile phone addiction between male and female adolescents, $t(77.671) = -3.093, p < 0.05, 95\% C.I. (-21.4761 - -4.6541)$. Female adolescents ($M=90.556, SD=24.8652$) are more addicted to mobile phones than male adolescents ($M=103.621, SD=16.3869$). Adolescents' personality does not differ based on their gender.

Table- 2: Age differences in adolescents' psychological well-being, mobile phone addiction, and personality.

Variables	Age	N	Mean	Std. Deviation	t-test for Equality of Means					
					t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Psychological Well being	12-15	44	210.045	15.3228	4.972	99	.000	22.4314	13.4795	31.3833
	16-18 years	57	187.614	26.7066	5.309	92.127	.000	22.4314	14.0407	30.8221
Mobile phone addiction	12-15 years	44	84.227	24.0792	-4.084	99	.000	-17.8604	-26.5386	-9.1822
	16-18 years	57	102.088	19.8623	-3.984	82.547	.000	-17.8604	-26.7780	-8.9429
Personality	12-15 years	44	29.432	3.9965	-1.258	99	.211	-.9366	-2.4136	.5403
	16-18 years	57	30.368	3.4725	-1.236	85.441	.220	-.9366	-2.4436	.5704

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An independent sample t-test showed a significant difference in adolescent age, $t(92.127) = 5.309$, $p < 0.01$, 95% C.I. (14.0407-30.8221). Adolescents aged 16-18 years ($M=187.614$, $SD=26.7066$) reported higher levels of psychological well-being than adolescents aged 12-15 years ($M=210.045$, $SD=15.3228$). Similarly, there is a substantial age difference in adolescent mobile phone addiction $t(82.547) = -3.984$, $p < 0.01$, 95% C.I. (-26.7780 - -8.9429). Adolescents aged 12-15 are more addicted to mobile phones ($M=84.227$, $SD=24.0792$) than those aged 16-18 ($M=102.088$, $SD=19.8623$). Personality does not differ significantly by adolescent age.

Table-3: The influence of school type on adolescents' psychological well-being, mobile phone addiction, and personality

Variables	School type	N	Mean	Std. Deviation	t-test for Equality of Means					
					t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Psychological Well being	Government	50	186.040	27.4397	-4.987	98	.000	-22.4800	-31.4256	-13.5344
	Matriculation	50	208.520	16.2195	-4.987	79.515	.000	-22.4800	-31.4516	-13.5084
Mobile phone addiction	Government	50	103.200	18.9036	4.074	98	.000	17.8400	9.1499	26.5301
	Matriculation	50	85.360	24.5247	4.074	92.034	.000	17.8400	9.1429	26.5371
Personality	Government	50	30.180	3.4916	.613	98	.541	.4600	-1.0280	1.9480
	Matriculation	50	29.720	3.9900	.613	96.306	.541	.4600	-1.0283	1.9483

An independent sample t-test showed a significant difference in adolescent psychological well-being based on school type, $t(79.515) = -4.987$, $p < 0.01$, C.I. (-31.4516 - -13.5084). Government school adolescents have higher psychological well-being ($M=186.040$, $SD=27.4397$) than Matriculation school adolescents ($M=208.520$, $SD=16.2195$). There is a significant difference in mobile phone addiction among adolescents based on their school type, $t(92.034) = 4.074$, $p < 0.01$, C.I. (9.1429 - 26.5371). The results show that matriculation school adolescents ($M=85.360$, $SD=25.5247$) are more addicted to mobile phones than government school adolescents ($M=103.200$, $SD=18.9036$). There is no significant difference in adolescent personality based on school type.

Table-4: The influence of mobile addiction and personality on adolescent psychological well-being.

Correlations				
		Psychological Well being	Mobile phone addiction	Personality
Psychological Well being	Pearson Correlation	1	-.440**	-.145
	Sig. (2-tailed)		.000	.147
	N	101	101	101
Mobile phone addiction	Pearson Correlation	-.440**	1	.377**
	Sig. (2-tailed)	.000		.000
	N	101	101	101
Personality	Pearson Correlation	-.145	.377**	1
	Sig. (2-tailed)	.147	.000	
	N	101	101	101

** Significant at the 0.01 level of significance (2-tailed).

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Correlation analysis reveals a strong negative relationship between psychological well-being and adolescent mobile phone addiction ($r = -4.40$, $p < 0.01$). There is a statistically significant positive correlation between Mobile phone addiction and the personality of adolescents ($r = .377$), $p < 0.01$. There is no correlation between adolescents' personalities and psychological well-being.

DISCUSSION

According to the findings of this study, there is a significant difference between male and female adolescents in terms of psychological well-being and mobile phone addiction. There are no statistically significant personality differences between male and female adolescents. According to the findings, male adolescents had a higher level of psychological well-being than female adolescents. The findings indicate that female adolescents are more addicted to mobile phones than male adolescents, which is consistent with Takao et al., 2009. Adolescents between the ages of 12 and 15 have a poorer degree of psychological well-being and are mobile phone addicts. Age has a little discernible effect on personality. Adolescents between the ages of 12 and 15 have worse psychological well-being and are more addicted to mobile phones than adolescents between the ages of 16 and 18. There is no evident age-related difference in personality. When compared to adolescents attending government schools, matriculation school adolescents have lower psychological well-being and are more reliant on mobile phones. Adolescents' school preferences are unrelated to their personalities. Psychological well-being, mobile phone addiction, and personality type are not significantly different by living area, family type, or parental employment level. Addiction to mobile phones has a strong correlation with psychological well-being. Increased levels of mobile addiction are associated with decreased psychological well-being, which is consistent with Munderia & Singh, 2018; Horwood & Anglim, 2019; Kumcagiz & Gunduz, 2016; Tangmunkongvorakul et al., 2019; Azemi et al., 2019; Zulkefly & Baharudin, 2009; and Balci et al., 2020. Mobile addiction has a strong correlation with psychological well-being. There was no significant association between personality and psychological well-being, which contradicts the findings of Nikbin et al., 2020; Volungis et al., 2019; and Ehrenberg et al., 2009.

CONCLUSION

Psychological well-being and mobile phone addiction were significantly influenced by gender, age, and school type. Male adolescents, those who attend government schools, and those aged 16 to 18 have greater levels of psychological well-being. Female adolescents, matriculation school adolescents, and adolescent's between 12–15 are more addicted to mobile phones. Personality is significantly related to mobile phone addiction. Addiction to mobile phones harms the psychological well-being of adolescents. The rise in mobile phone addiction is causing a decline in psychological well-being.

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Conflict of Interest

The author said that he does not have any conflicts of interest.

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