

The Effect of Mobile and Internet Addiction on Self-esteem among Adolescents

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Abstract:

This study examined the effect of self-esteem on mobile and internet addiction among adolescents. The Internet Addiction Scale (IAS), Mobile Phone Dependence Questionnaire (MPDQ) and Rosenberg Self-esteem Scale were used to obtain data from 216 adolescents, 109 male and 107 female participants. The obtained data was analyzed using Pearson-product Moment correlation and descriptive statistics using mean, standard deviation, maximum and minimum scores. The results indicated that there was a negative correlation between self-esteem and internet addiction, a positive correlation between mobile addiction and self-esteem and strong positive correlation between mobile addiction and internet addiction. Gender differences were also noted between the variables. These results are discussed with reference to related literature and conclusions drawn.

Keywords: Adolescents, Self-esteem, Mobile addiction, Internet addiction.

Introduction:

Information Communication Technology (ICT) offers faster, more immediate access to information than was available in the past. It provides instant exchange of information in minutes or seconds across geographical boundaries and time zones. The normal

considerations of time and distance become less important in the exchange. Hence, these technologies have important influences on people's behaviour.

Computer mediated communication is impersonal in nature. The sender interacts with a machine, not a person. Studies indicate that using these technologies results in an increase in flaming or making rude or obscene outbursts by computer. Interpersonal skills like tact and graciousness diminish and people are blunt when using electronic media. Another effect of computer mediated communication is that the nonverbal cues like gesturing, touching, facial expressions and eye contact that are relayed on to decipher a message are not available, so the emotional element of the message is difficult to access. New technologies may also make people less patient with face to face communication. The advantage of speed of the electronic media may translate into expectation of greater speed in all forms of communication. However, individuals may miss the social interaction with others and may find their social needs unmet. Communicating via computer means an absence of small talk, people tend to get to the point right away. With many of these technologies, the potential for immediate feedback is reduced.

There is an enormous impact of the mobile phone on contemporary society from a social scientific perspective. Some people are replacing face-to-face conversations with cybernetic ones (Gazelle).

Internet addiction is a subset of a broader "technology addiction". Obsession with technology started with radio in the 1930's and with television in the 1960's, but has recently exploded in importance during the current digital age. Internet addiction disorder (IAD) originally proposed as a disorder in a satirical hoax by Ivan Goldberg, M.D., in 1995, is now more commonly called Problematic Internet Use (PIU) or Compulsive Internet Use (CIU). These terms avoid the word addiction and are not limited to any single cause, but only reflect a general statement about excessive computer use that interferes with daily life. Habits such as reading, playing computer games, or watching very large numbers of internet videos or movies are all troubling only to the extent that these activities interfere with normal life. IAD is often divided into subtypes by activity, such as excessive, overwhelming, or inappropriate internet pornography use, gaming, online social networking, blogging, email, or internet shopping.

Interest in, and the study of, internet over use can be attributed to the fact that it has become increasingly difficult to distinguish between the online and offline worlds. The Internet has

tremendous potential to affect the emotions of humans and in turn, alter our self-perception and anxiety levels.

Self-esteem is a person's overall self-evaluation or sense of self-worth. Self-esteem may be affected by inability to attain ideals in specific domains (physical, social or academic) of self-perception. Facing failure, high self-esteem people sustain their self-worth by perceiving other people as failing, too, and by exaggerating their superiority over others (Agostinelli & others, 1992; Brown & Gallagher, 1992). The more physiologically aroused people are after a failure, the more likely they are to excuse the failure with self-protective attributions (Brown & Rogers, 1991).

Self-esteem has been viewed both as a trait (reflecting stability over a period of time), and a state (reflecting response to situations or life events, or a response to cues from other people, such as a "looking glass" orientation) Harter and Whitesell (2003). Self-esteem is a major "predictor" of satisfaction with life.

Adolescence, the period of transition from childhood to adulthood, is a critical time for the development of lifelong perceptions, beliefs, values and practices. It is also a period of rapid physical, social, and cognitive growth as well as changes in self-esteem. Self-esteem, also called self-worth, is a major predictor of outcomes during adolescence and adulthood. Higher levels are associated with several positive outcomes, such as occupational success, social relationships, well-being, positive perceptions by peers, academic achievement, and improved coping skills (Trzesniewski et al., 2003). Low self-esteem is associated with adverse outcomes, such as depression, substance abuse, and antisocial behavior. Therefore, before entering adulthood, it is important for the adolescent to develop high self-esteem and the ability to care for the self.

Adolescents are at the highest risk for excessive internet use (Mossbarger, 2008, Yen, Yen, Chen, Chen & Ko, 2008). Adolescents' beliefs and perceptions about themselves reflect in their behaviour characteristic when using the internet. In many studies, it has been revealed that adolescents tend to appear different from what they are when expressing themselves in dating sites, social networking sites and gaming sites (Madell & Muncer, 2006; Ross, Orr, Sisis, Arseneault, Simmering, & Orr, 2009; Sheeks & Birchmeier, 2006). In addition, there has been a study in which the relationship between addiction and self-esteem is revealed (Greenberg, Lewis & Dodd, 1999).

The association between self-esteem and addiction is not unusual. Various studies exist on this issue and it is concluded that a strong relationship exists between these two variables (Greenberg, Lewis & Dodd, 1999; Richter, Brown & Mott, 1991). In fact, the relationship between Internet addiction and self-esteem has been discussed in several studies. In these studies, personality traits, self-esteem and other psychiatric disorders were shown to be associated with Internet addiction (Griffiths, 2000). Davis (2001) has told about the distal and proximal factors associated with the use of Internet. According to Davis, distal factors associated with the Internet use refer to the underlying psychopathology. These may be depression, social anxiety and other dependencies. Proximal factors refer to the maladaptive cognitions. Negative evaluation of self and the world may be the maladaptive cognitions. Young (1998) has reported that vast majority of Internet addicts has a history of experiencing depression and anxiety. Low self-esteem in another part has also been reported. In some other studies, self-esteem has emerged a factor associated with Internet use (Jackson, Eye, Fitzgerald & Zhao, 2010) and problematic Internet use (Kim & Davis, 2009). In addition the research on self-esteem and the use of Internet, there has been studies examining adolescents' use of some social networking sites and its association with their self-esteem.

In these studies, it is seen that adolescents with low self-esteem tend to spend more time in social networking sites than those with higher self-esteem (Ellison, Steinfield & Lampe, 2007). In this study, self-esteem was examined in determining Internet and mobile addiction among adolescents in the Goa.

Methods:

2.1. Participants and Procedure

2.1 Participants

The participants for the research were 216 adolescents, drawn from different schools in Goa from the high school and higher secondary schools that is 9th, 10th, 11th and 12th standard classes. The sample consisted of 109 (50.46%) male students and 107 (49.53%) female students. Their mean age was 15.48 years and SD = 1.37. The participant's age ranged from 12-19 years. All the participants were comfortable in the English language and only students who used the internet were included in this research. The measures were administered in classrooms. Prior to administration of scales, purposes of the study were explained to all participants. Participants were asked to mark their age, class, place of residence, name of

school, class studying, if they knew how to use the internet on the computer and on their mobile phones and number of hours spent on the internet per day.

2.2 Measures:

Internet Addiction Scale (IAS)

The Internet Addiction Scale (IAS) is a revisited version of “Internet Addiction Diagnostic Questionnaire” which devised by Young (1996). Scale consisting of 20 items that measures mild, moderate and severe level of internet addiction. The items are rated on a 6 point scale of 0-5, where 0 indicates not applicable, 1 rarely, 2 occasionally, 3 frequently, 4 often and 5 always. Addiction levels were calculated by adding the score for each item. The scores range from 0-100. The higher the score, the greater level of addiction. Scores between 0 to 30 were the normal range, between 31 and 49 fell in the mild addiction range, between 50 to 79 in the moderate range and between 80 to 100 points indicated severe addiction.

Mobile Phone Dependence Questionnaire (MPDQ)

Mobile phone dependence was evaluated using the MPDQ, a self-rating questionnaire which consists of 20 items, developed by Toda, Monden, Kubo, and Morimoto, 2004. Each response is scored on a Likert scale (0, 1, 2, and 3). Likert scores for each item are then summed to provide a quantitative overall mobile phone dependence score ranging from 0 to 60. Higher scores indicate greater dependence. Subjects in the highest quartile were put in the high-dependence category.

Rosenberg Self-esteem Scale

The 10-item Rosenberg Self-esteem Scale measures global self-worth by measuring both positive and negative feelings about the self. The scale is unidimensional and all items are answered using a 4-point Likert scale format ranging from strongly agree to strongly disagree. The scores range from 0-30 and scores between 15-25 are within normal range, scores below 15 suggest low self-esteem.

Procedure:

After obtaining permission for the school authorities, the measures were administered to students. The respondents were assured of confidentiality and the use of their responses for research purposes only. The respondents were encouraged to answer all questions and not leave out any items.

Once the data was collected, the researchers scrutinized the questionnaires and included only those questionnaires that were complete for the data.

Results:

Table 1 indicates the correlation between the three variables. The first hypothesis that self-esteem will be negatively correlated with mobile addiction and internet addiction has been partially accepted.

Table 1 Inter-correlations between the variables

Variables	Self Esteem	Mobile Addiction	Internet Addiction
Self Esteem	1		
Mobile Addiction	-0.130	1	
Internet Addiction	-0.156	0.679**	1

**p<0.001

There was a negative but weak correlation between internet addiction and self-esteem. Individuals with a low self-esteem, seem to spend more time on the internet, which becomes a convenient source of time pass as these individuals would prefer to interact with others via social media, rather than face to face.

Mobile addiction and self-esteem had a negative correlation of -0.130. These results indicate that mobile addiction decreases an individual's self-esteem. Many mobile phone addicts are people with low self-esteem and poor social relationships; thus, they think they should be in constant contact with others.

Technology addiction in general and dependency on cell phones in particular are important for several reasons. Despite the advantages and necessity of technologies for human society, due to their stimulating factors, they results in excessive use and lead to addiction. Young people are more vulnerable to excessive phone use, and thus, become phone dependent. (Chóliz M, 2012).

There was a negative correlation between internet addiction and self-esteem. The correlation coefficient was -0.156. However there was a weak relation between the two variables. Research literature also indicates that there exists a negative relationship between self-esteem and internet addiction, Griffiths & Banyard, (2005). Griffith's (2000) studies provide important findings in disclosing this relationship. He states that the participants' use of

internet is highly associated with its perception as a coping style and way of a compensation of some deficiencies such as low self-esteem. According to him, it allows them to feel better, because it is an alternative for which they take different personality and social identity. In other words, they highly satisfy themselves in this way. As can be seen, when individuals evaluate themselves in a negative way, they may perceive the internet as a way for the compensation of these negations and increasing internet use may turn into a dependent relationship.

There was a significant positive correlation between internet addiction and mobile phone dependence. The correlation coefficient was 0.679, significant at $**p < 0.001$. Padwa and Cunningham (2010) states that, the most common form of internet addiction among young people is online gaming addiction. These games offer young people the opportunity to express themselves in a way that they could never be in real life and the pleasure they obtained from this kind of interaction makes it turn into an addictive use. Furthermore, such games provide never-ending goals and tasks to individuals. When they become successful in these games, they perceive an increased sense of power and a higher status. In other words, Internet use may emerge as a way in which individuals make up perceived deficiencies and have a positive evaluation of self for a temporary time.

Given the importance of social relationships during adolescence, it seems inevitable that the self-esteem levels of adolescents affected by the qualities of peer relationships. Craig (1995) states that, an individual's negative self-evaluation in peer relationships may cause the dependent behaviors in order to avoid these stressful relationships (As cited in Armstrong at al., 2000). Padwa and Cunningham (2010) refer to social factors associated with Internet addiction. According to them, online games with multi-player attract young people because these games are simulation of social communication in real life. In addition, a degree of anonymity especially attracts individuals who may be anxious in social situations. In relevant literature, it is not reached a consensus whether self-esteem is a cause or a result of internet addiction (Niemz at al., 2005; Shaw & Gant, 2002).

Conclusion:

In this study, self-esteem is discussed as an antecedent to internet addiction. As mentioned above, self-esteem is an important determinant of individuals' behaviors and activities. Some of these activities support development of an individual; on the other hand some of them are harmful for personal development. Internet addiction is one of them and with a sense of

diminishing self-control; it may cause a further reduction in self-esteem. The general inference we can make is that self-esteem has an influential role on adolescents' development. Thus, adolescents need to gain the belief that they are worthy. An emphatic understanding of their experiences and accepting them as they are may be the first step taken by parents, educators and counselors. Within the school environment, presenting a large number of social and sporting opportunities for adolescents to test and develop their abilities may also be very helpful. As a final recommendation, it is thought that counselors should organize informative and preventive group activities about the proper use of internet and the results of excessive use. In this study certain limits should be considered. The data are not representative of adolescents throughout Goa, because this study conducted only in South Goa. Secondly, all of the data collected in this study were obtained from self-report scales. Therefore, the results may be limited by the adolescents' lack of openness. In conclusion; this study is an effort to examine whether self-esteem is determinant on internet addiction. Based on the results of this study, experimental studies aimed at promoting self-esteem on adolescent addicts would be done.

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