

Internet Addiction and Shyness among Adolescents

Mahadevaswamy. P¹, Lancy D'souza^{2*}

ABSTRACT

This study evaluated the effect of internet addiction on shyness among adolescents in and around Mysore City. The sample consisted of equal numbers of (360 each) boys and girls aged between 16 to 18 years and was chosen from 16 different schools and Pre-university colleges in and around from Mysore. The students completed an Internet addiction scale (Young, 1998) and Shyness assessment test (D'Souza, 2006). Two way ANOVA was employed to find out the significance of difference between adolescents with normal, problematic and addict levels of internet addiction on shyness including gender effects. Results revealed that as the levels of internet addiction increased, shyness in various domains-cognitive/affective, physiological and action-oriented domains increased significantly. With addict and problematic level of addiction the shyness scores did not vary statistically. Female adolescents were found to be shyer than male adolescents in all the domains and total scores, except for physiological domain. Implications of the findings of the study have been delineated.

Keywords: *Internet Addiction, Shyness, Adolescents.*

Computers are extensively used in various fields of human activity. The internet is a global computer network providing a variety of information and communication facilities, consisting of interconnected networks using standardized communication protocols. It is a network of networks that connects millions of the people around the world. The internet is a widely recognized channel for information exchange, academic research, entertainment, communication, and commerce. Now the utilization of the internet and its outcomes has become a controversial issue. At one side it is very important and useful need of modern man while at the other side people are sickly addicted to it. Researches show that the regular utilization of the internet caused a lot of psychological and mental disorders like anxiety, depression, stress and obsessive-compulsive disorder (Azher, 2014).

¹ (Research Scholar, Department of Psychology, Maharaja's College, University of Mysore, Mysore-570 006, India.)

² (Associate Professor of Psychology, Maharaja's College, University of Mysore, Mysore-570 006, India)

**Responding Author*

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The concept of internet addiction, which was first used by Goldberg in 1995, which is tried to be defined through different terms such as “net addiction”, “internet addiction”, “online addiction”, “internet addiction disorder”, pathologic internet use” and “cyber disorder” (Eichenberg & Ott,1999). Shaw and Black (2008) stated that Internet addiction is “characterized by exorbitant or poorly controlled preoccupations, urges or behaviors regarding computer use and internet access that lead to impairment or distress”. Kandell (1998) defined Internet addiction as “a psychological dependence on the Internet, regardless of the activity once logged on”. Internet addiction Disorder means excessive use of the internet with symptoms like anger, tension, and anxiety (Goldberg, 1995).

Young (1999) claims ‘Internet addiction is a broad term that covers a wide variety of behaviors & impulse control problems’. Internet addiction is categorized by five categorical subtypes:

- Cybersexual addiction: compulsive use of adult websites for cyber-sex & cyberporn.
- Cyber-relationship addiction: over involvement in online relationships.
- Net compulsions: obsessive online gambling or day trading.
- Information overload: compulsive web surfing or database searches.
- Computer addiction: obsessive computer game playing.

Shyness can be defined as a feeling of discomfort or inhibition in social or interpersonal situations that keeps from perceiving the goals, either academic or personal. Shyness results in excessive self-focus and worry, often a preoccupation with one’s thoughts, feelings or physical reactions (accelerated heart rate, pulse, etc.). The degree to which shyness can create problems for people varies widely, from mild social clumsy to debilitating social phobia (Buss, 1985).

Shyness is the “tendency to feel awkward, worried or tense during social encounters, especially with unfamiliar people” (APA, 2012). Shyness may also produces physical symptoms such as sweating or stomach complications (APA, 2012). Zimbardo (1998) showed that shyness is problematic or chronic implicates an excessive concern about negative evaluation and/ or an avoidance of participation in social situations that would otherwise be pleasurable or consequential to one’s professional or personal growth. Crozier (1979), identified that shyness can refer to social anxiety, communication apprehension, social skills defects, embarrass ability, lack of poise, modest reserve, introversion, reticence, self-consciousness, non-assertiveness & audience sensitivity. Shyness is the fear to meet people and the discomfort in others presence. (Pilkonis, 1977). Studies have shown that shyness does influence personality and academic achievement (D’Souza, Urs & James, 2000) and shy individuals are in need of guidance needs especially in emotional and social domains (D’Souza, Urs, & Jayaraju, 2008).

Adolescence is considered the most vulnerable period of an individual’s life. It is not just enough if an adolescent is conscious of the critical time he is passing through, but the parents, elders, teachers etc. as well, in order to handle him properly and profitably. Development of

technology has to lead to many inventions and discoveries; the internet is one among them. The human tendency to try new things does not stop. Everyone is attracted to new things but it depends on how they use it. Decision-making capacity is not the same throughout the life; it keeps gaining more stability on experience. Many encounters like misuse of the internet or becoming a victim without proper knowledge are seen in many instances which harm one's life.

Adolescents are attracted to the internet because of their developmental characteristics of being curious to know answers on many issues. The internet is the fastest means which keep in touch with information and having fun. Being online will lead to lack of physical contact and prevents from knowing an individual person. Easy interaction over online may not be the same during face to face, an individual might encounter shyness. Also, internet addiction leads to many psychological issues which harm the peaceful mind leading to not maintaining wellness in life.

The present study was chosen to explore the levels of internet addiction among adolescents and their relationship with shyness.

METHOD

Sample

High school students and College students studying 10th, 11th and 12th class were selected for the purpose of the study. Of the 720 students included in the study, 360 were adolescent boys and the rest were girls. They were studying in the schools and colleges situated in the urban and rural areas of Mysore district in Karnataka.

Tools

1. Demographic data sheet

The first part designed to collect preliminary information regarding details of schools and student's gender, medium, class, area etc.

2. Internet addiction scale

Internet Addiction Test (IAT) was developed by Dr. Kimberly Young, 1998 and it consists of 20 questions was adopted to evaluate the respondents' level of internet addiction. Each item is scored using a five-point Likert scale, a graded Response can be selected (0 = "does not apply" to 5 = "always"). It covers the degree to which internet use affect daily routine, social life, productivity, sleeping pattern, and feeling. The minimum score is 20 while the maximum is 100 and the higher the score the greater the level of internet addiction. The types of Internet-user groups were identified in accordance with the original scheme of Young and the score < 20 indicate normal users. The scores ranging from 20 to 49 indicate problematic users, while scores from 50 to 79 indicate addict users and the scores from 80 to 100 indicate excessive users. The problematic users were classified as problematic internet users. While addict and excessive users were categorized as internet addicts. The instrument has exhibited good psychometric properties in previous researches.

3. Shyness Assessment test

Shyness Assessment Test (SAT) developed by D'Souza (2006). It consists of 54 yes/no items. If the answer is 'yes', further, the participant has to indicate one of the three levels-low, medium or high. The items in the test pertain to three domains of shyness-Cognitive/Affective (32 items), Physiological (11 items) and Action-oriented (11 items). Item analysis of the scale using the SPSS program resulted in Cronbach's alpha coefficient of 0.7119.

Procedure:

The researcher personally went to selected schools in the Mysore city, produced the permission letters for the administration of the test and took the permission from the respective heads of the institution and administer the tool to 720 adolescent students. Before administering the questionnaires, the high school students and Pre-university college students were assured that their responses will be used only for research purpose and will be treated as strictly confidential. They were asked to answer all questions. The instructions are read out and each item in the questionnaire were explained in order to get a good response. Once the data were collected, they were scored and fed to the computer.

To analyze the influence of internet addiction and gender on shyness, 2 way ANOVA was employed for each domain of shyness including total shyness scores. Scheffe's post hoc tests were applied between addiction levels whenever F values were found to be significant. Table 1 presents mean shyness scores of male and female adolescents in different levels of internet addiction and results of two- way ANOVA.

RESULTS

Table 1, Mean shyness scores of male and female adolescents in different levels of internet addiction and results of two- way ANOVA

Levels of Internet addiction	Gender	Components of shyness							
		Cognitive/effective		Physiological		Action-oriented		Total shyness	
		Mean	S.D	Mean	S.D	Mean	S.D	Mean	S.D
Normal	Male	24.54	8.35	6.88	3.36	7.49	4.69	39.06	13.15
	Female	25.78	7.51	7.34	3.24	8.03	4.28	41.11	12.08
	Total	25.33	7.83	7.17	3.29	7.84	4.43	40.36	12.48
problematic	Male	27.02	7.17	8.01	3.95	8.20	3.99	43.11	12.22
	Female	29.22	7.07	8.18	3.62	8.91	4.19	46.30	11.52
	Total	28.05	7.20	8.09	3.79	8.53	4.09	44.60	11.99
Addict	Male	28.00	6.96	8.65	4.09	8.72	4.15	45.31	12.29
	Female	28.19	6.26	9.07	3.65	10.02	4.44	47.32	11.27
	Total	28.08	6.66	8.82	3.91	9.25	4.30	46.13	11.89
Total	Male	26.77	7.43	7.94	3.91	8.18	4.18	42.84	12.55
	Female	27.91	7.25	8.04	3.54	8.79	4.30	44.73	11.92
	Total	27.34	7.36	7.99	3.73	8.49	4.25	43.78	12.27
F (Int. add level) _{2,714}		F= 10.948; P=.000		F= 8.840; P=.000		F=5.589 ; P=.004		F=12.36 ; P=.000	
F (Gender) _{1,714}		F=4.038 ; P=.045		F=1.282 ; P=.258		F= 5.820; P=.016		F=5.752 ; P=.017	
F (interaction) _{2,714}		F=1.024 ; P=.360		F=0.117 ; P=.890		F=0.336 ; P=.715		F=0.198 ; P=.820	

Internet addiction, gender and cognitive/affective domain of shyness: As the levels of internet addiction increased scores on the cognitive/affective domain of shyness also increased significantly ($F=10.948$; $p=.000$). The mean shyness scores of adolescents with normal, problematic and addict levels of internet addiction were 25.33, 28.05, and 28.08 respectively. Further, Scheffe's post hoc test indicated no significant mean difference between adolescents with problematic and addict levels of internet addiction in their shyness scores. The gender-wise comparison indicated that female adolescents were shyer ($F=4.038$; $p=.045$) than male adolescents (mean scores 27.91 and 26.77 respectively). Lastly, the interaction effect between levels of IA and gender was found to be nonsignificant.

Internet addiction, gender and physiological domain of shyness: In this domain, again we find that as the IA levels increased, scores on shyness also increased significantly ($F=8.840$; $p=.000$). The mean shyness scores of adolescents with normal, problematic and addict levels of internet addiction were 7.17, 8.09 and 8.82 respectively. Further, Scheffe's post hoc test indicated no significant mean difference between adolescents with problematic and addict levels of internet addiction in their shyness scores. However, gender-wise and the interaction effect between IA levels and gender were found to be non-significant.

Internet addiction, gender and action-oriented domain of shyness: F value revealed a significant difference ($F=5.589$; $p=.004$) between mean shyness scores of adolescents with different levels of IA. The mean shyness scores increased significantly as the levels of IA increased, with mean values of 7.84, 8.53 and 9.25 respectively for adolescents with normal, problematic and addict levels of IA. Female adolescents were shyer than male adolescents (mean scores 8.18 and 8.79) which were found to be statistically significant ($F=5.820$; $p=.016$) and the interaction effect between IA levels and gender was found to be nonsignificant.

Internet addiction, gender, and total shyness scores: As the levels of internet addiction increased, total shyness increased significantly ($F=10.948$; $p=.000$). The mean total shyness scores of adolescents with normal, problematic and addict levels of internet addiction were 40.36, 44.60 and 46.13 respectively. Further, Scheffe's post hoc test indicated the significant mean difference between adolescents with different levels of IA in their total shyness scores. The gender-wise comparison indicated that female adolescents were shyer ($F=5.752$; $p=.017$) than male adolescents (mean scores 42.84 and 44.73 respectively). Lastly, the interaction effect between levels of IA and gender was found to be nonsignificant.

DISCUSSION

Major findings of the study are

- As the levels of internet addiction increased, shyness in various domains-cognitive/affective, physiological and action-oriented domains increased significantly.
- With addict and problematic levels of internet addiction, the shyness scores did not vary statistically.

Internet Addiction and Shyness among Adolescents

- Female adolescents were found to be shyer than male adolescents in all the domains and total scores, except for physiological domain.

The results of the present study are in agreement with studies done elsewhere. Huan *et al.* (2014), in his study on adolescents, found significant correlations among shyness, internet addiction and loneliness. The findings further corroborated by the studies done by Chandrasekhar, D'Souza, and Rangaiah (2012) who worked on shyness and technology use among adolescents. Further, the author observed that loneliness completely mediated the relationship between shyness and generalized problematic Internet use. Terwase and Ibaishwa (2014) reported that shyness, resilience, and loneliness significantly predict internet addiction. Ayas, (2012), studied the relationship between internet and computer game addiction level and shyness among high school students and found a positive, meaningful, and high correlation between the internet addiction and Shyness. Odaci and Celik (2013), studied the correlations between problematic internet use and shyness, loneliness, narcissism, aggression, and self-perception. Correlation analysis results showed positive associations between problematic internet use and shyness and aggression. The results demonstrate that individuals who are problematic users are shyer and more aggressive. Eldeleklioglu and Batik (2013), studied predictive effects of academic achievement, internet use duration, loneliness and shyness on internet addiction in Bursa and found that shyness significantly and positively predicted internet addiction. Scealy *et al.* (2002) predicted that with the increased popularity of the Internet and its facilitation of relationships on and offline may be detrimental to those who have difficulties with the offline aspects, and would cause social isolation for those with high levels of shyness. Ebeling-Witte *et al.* (2007) opine that the Internet offers shy individuals a medium through which to communicate with the world around them even though their online behavior may be viewed as “problematic” according to some psychological measures. The shy individuals may use the Internet to decrease a perceived deficit in their real-life social network by establishing virtual friendships online, to relieve feelings of loneliness and depression, and to avoid instead of attend to stressful matters at hand.

The results of this study have several educational implications. It is evident that at least researchers can use shyness as a predictor of Internet Addiction; it would be much easier to identify students with an Internet Addiction problem. The results of this study demonstrate the need for further research. If Internet Addiction and shyness are related, then what will be the consequences on their social and emotional growth? Are these adolescent shaving normal process of growth and development in their psychosocial aspects? Since both shyness and internet addiction are detrimental to human growth and potential, there is an urgent need to look into these issues, so that adolescents can concentrate more on academic and extracurricular activities, which will lead to the growth of positive potentials among them for their better future.

- resilience, shyness, and loneliness
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Internet Addiction and Shyness among Adolescents

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Conflict of Interest

The authors colorfully declare this paper to bear not a conflict of interests

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