

RELATIONS AMONG LONELINESS, DEPRESSION, ANXIETY, STRESS AND PROBLEMATIC INTERNET USE

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ABSTRACT

Fast growth and easy access to the Internet have facilitated its influence on the adolescents' way of life. Besides its several benefits, this technological tool is subject to the problem of overuse which has become apparent resulting in "Internet Addiction". College going students are particularly vulnerable group for the Problematic Internet Use (PIU). The aim of the present study is to examine the Problematic Internet Use among adolescents while gauging the relations among loneliness, depression, anxiety, stress and PIU. The sample consisted of 84 junior college students studying in various colleges in and around Ulhasnagar. Data was collected using the Online Cognition Scale (OCS), UCLA Loneliness Scale, Depression, Anxiety and Stress Scale (DASS 21). The data was analyzed using correlation analysis. The gender differences was determined using the 't' test. Implication of the findings are discussed.

KEYWORDS: Problematic Internet Use (PIU), Loneliness, Depression, Anxiety and Stress

INTRODUCTION

Internet is being extensively used all around the world. The number of users is increasing day by day. Computers and the Internet have become an essential part of our lives today, especially among the adolescent and youth. They have made lives easy. But its problematic use relating to the physical and psychological problems has attracted a lot of researchers. One of the most common of these problems is internet addiction (Murali & George, 2007; Shapira, Lessig, Goldsmith et al., 2003; Young, 1998). This problem is affecting a large number of people with varying frequency around the world and producing negative impacts on the academic, financial, occupational and relationship aspects of many lives (Griffiths, 2000; Chou & Hsiao, 2000; Young, 1998). Research on internet addiction demonstrated that the greater use of the internet is associated with some social and psychological variables such as, declines in the size of social circle, depression, loneliness (Kraut et al., 1998), lower self-esteem and life satisfaction (Ko, Yen, Chen et al., 2005), sensation seeking (Lin & Tsai, 2002), poor mental health (Yang, 2001; Young & Rogers, 1998), and low family function (Armstrong, Phillips, & Saling, 2000). Ceyhan & Ceyhan, (2008) investigated the levels of loneliness, depression and computer self-efficacy as predictors of problematic use. They found loneliness was found as the most important predictive variable followed by depression and computer self-efficacy.

Adolescence is a stage of life in which the adolescents have to deal with a lot of changes including their bodies, increased their autonomy, and relationships with their peers and parents. Hence loneliness is common and quite intense during adolescence (e.g., Brennan, 1982). Research suggests that adolescents' loneliness is related to peer relations (Storch, Cassard, & Masia-Warnet, 2003) as well as to self-esteem, family strengths, and to mother-adolescent communication (Barge & Meredith, 1993). Defirmencioglu (1995) (cited in Subrahmanyam and Lin (2007)) found that

adolescents who had a cohesive and highly interconnected friendship network reported less loneliness, less depressed moods and more support from their friends. During this stage of life major decisions regarding their careers have to be made hence the adolescents' experience a lot of anxiety and stress.

There are a number of emotional factors which may be related to college students' internet addiction (Kandell, 1998). Many people turn to the Internet in order to manage unpleasant feelings such as stress, loneliness, depression, and anxiety. Research on internet addiction and depression demonstrated that the overuse of the internet, was associated with an increase in the frequency of depression (Kraut et al., 1998, 2002; McKenna & Bargh, 2000; Nie, Hillygus, & Erbring, 2002).

Because, excessive internet use can displace valuable time that people spend with family and friends, which leads to smaller social circles and higher levels of loneliness and stress (Nie et al., 2002). Other conclusions of excessive usage have been documented as avoiding of academic, work, and domestic responsibilities, disruption of relationships, social isolation, and financial problems (Griffiths, 2000; McKenna & Bargh, 2000).

Internet addiction also may contribute to anxiety and stress (Egger & Rauterberg, 1996). Those who suffer from anxiety and stress often have immense trouble interacting and communicating with others in a healthy, positive, and meaningful way. These human characteristics are viewed as important determinants of internet addiction. There are a number of researchers who have studied the correlation between loneliness and Internet use (Caplan, 2002; Eldeleklioglu, 2008; Kim, LaRose & Peng, 2009; Morahan- Martin & Schumacher, 2000; Özcan, & Buzlu, 2005; 2007; Whang, Lee & Chang, 2003). One of the major motive driving individuals to internet use is to relieve psychological problems (e.g., Loneliness and Depression). Loneliness is directly related to deficit in social skills and preference for online interactions and compulsive internet use (Kim, LaRose, Peng, 2009).

There is growing popularity of internet communication application among the adolescent which is at the expense of other activities of the daily life particularly those involving face to face social interaction. There is lack of research on PIU with children and adolescent. Hence this study has tried to explore the correlates of internet usage.

In this study Loneliness is defined as a social deficiency i.e., the extent to which person's network of social relationships is smaller or less satisfying than the person desire. Depression is operationalized as an abnormal state of the organism manifested by signs and symptoms such as low subjective mood, pessimistic attitudes, loss of spontaneity and anxiety is operationalized as an emotional state of subjective worry, along with heightened arousal of the autonomic nervous system, and stress is operationalized as an emotional state of bodily or mental tension resulting from factors that tend to alter an existent equilibrium

This study aims to investigate both the correlation between Loneliness, Depression, Anxiety, and Stress and Problematic Internet Use (PIU) amongst Junior college students (average age 17 years). Within this general framework, answers to the following questions were sought:

- To what extent are loneliness, depression, anxiety and stress variables associated PIU?
- Does PIU among students show significant difference in terms of gender?

RESEARCH METHODOLOGY

Research Design

This study uses a quantitative descriptive design to explain the correlation among Loneliness, Depression, Anxiety, and Stress variables and PIU among Junior college students.

The Sample

The research sample is comprised of 84 students (N= 84) studying in the Science Stream of various Junior(Std. XII) Colleges in and around Ulhasnagar, of which 59 were Males and 25 were females.

Prior to data collection, students were provided with information about the study and only those who volunteered to take part were chosen.

Data Collection Methods

Data were collected using Online Cognition Scale (OCS), UCLA Loneliness Scale, Depression, Anxiety and Stress Scale (DASS- 21).

Online Cognition Scale (OCS)

This questionnaire is about the thoughts related to the internet. It was developed by Davis, Flett, & Besser (2002), to assess PIU along with its four sub-dimensions (loneliness/depression, diminished impulse control, distraction, and social comfort), the scale is made up of 36 items on a 7-point Likert scale. Reliability: Cronbach's alpha =0.94.

UCLA Loneliness Scale (UCLA-LS)

UCLA Loneliness Scale was developed by Russell, Peplau and Cutrona (1980); the validity and reliability of its adapted version is tested by Demir (1989). The scale measures the overall feelings of loneliness in individuals through a self-report Likert-type scale comprised of 20 items.

10 of these items are positive statements and the rest are negative statements. The scale reports range from 20 to 80 where higher scores mean a higher degree of feelings of loneliness. Reliability of the scale is reported as 96

Depression, Anxiety and Stress Scale - 21 Items (DASS-21)

Developed by Lovibond, S.H. & Lovibond, P.F. (1995). It is a set of three self-report scales designed to measure the emotional states of depression, anxiety and stress. The reliabilities (internal consistencies) of the DASS-21 Depression, Anxiety, Stress, and total scales were estimated using Cronbach's alpha α . was 88 for the Depression scale, 82 for the Anxiety scale, 90 for the Stress scale, and 93

Data Analysis

Multiple correlational analysis was used to identify the main predictors of PIU. While t-Test analysis assessed the gender differences in the PIU.

Findings

Table 1: Correlation Martix Values of the Variables

Variables	PIU	UCLA	Depression	Anxiety	Stress	DASS
PIU		0.25**	0.31**	0.20*	0.41**	0.3**
UCLA	0.25**		0.59**	0.30**	0.45**	0.58**
Depression	0.31**	0.59**		0.24**	0.45**	0.74**
Anxiety	0.20*	0.30**	0.20*		0.62**	0.76**
Stress	0.41**	0.45**	0.45**	0.62**		0.87**
DASS	0.39**	0.58**	0.74**	0.76**	0.87**	

** $p < .01$ * $p < .05$

Table 1 indicates that there are significant correlations between PIU, Loneliness, Depression, Anxiety, and Stress. PIU is related positively to loneliness ($r = .25$, $p < .01$), to depression ($r = .31$, $p < .01$), anxiety ($r = .20$, $p < .05$), and stress ($r = .41$, $p < .01$).

Table 2: Reports the Mean Scores, Standard Deviation, and t-values of Female and Male Students in Relation to the OCS, DASS and UCLA

Variables	Gender	N	Mean	SD	t	p value
OCS	Female	25	120.56	23.82	1.99	n.s
	Male	59	120.74	32.96		
DASS	Female	25	89.04	72.04	1.99	n.s
	Male	59	82.37	16.41		
UCLA	Female	25	18.32	9.85	2.00	$p < .05$
	Male	59	21.898	11.51		

Table 2 indicates that there is no significant difference between gender on PIU and Depression, Anxiety and Stress.

There is a significant difference between the gender on loneliness $t = 2.00$, $df = 82$, $p < .05$

DISCUSSIONS

The aim of this study was to investigate the relationships among Loneliness, Depression, Anxiety, Stress and PIU. The findings have demonstrated that there are significant relationships among these variables.

As expected, Loneliness, Depression, Anxiety, and Stress predicted positive PIU (Akin, & İskender, (2011). Recent studies on internet addiction demonstrated that internet addiction related positively to decrease in social interactions, depression, loneliness, and lower self-esteem (Ko, Yen, Chen et al., 2005; Kraut et al., 1998). So, it can be said that this finding is consistent with other studies that have found a positive relationship between depression and internet addiction (Kraut et al., 1998, 2002; McKenna & Bargh, 2000; Nie et al., 2002; Young & Rogers, 1998). Also, supportive data can be found in the studies of depressed individuals who are more likely to engage in internet use (Caplan, 2003; Kubey, Lavin, & Barrows, 2001; Young & Rogers, 1998). Therefore, it appears that if individuals can decrease their internet addiction, they may decrease their depression level. However, Serin, (2011) found loneliness predicted Internet use at low level. A major study on Internet use and loneliness (Kraut, et. al, 1998) also support the results from this study. It could be surmised from that result that students might be spending more time on their computers than involved in the community.

In terms of the relationship between internet addiction, anxiety, and stress, there is no research evidence to

demonstrate this relationship. However, since the greater use of the internet is associated with some social and psychological maladaptive variables such as, declines in the size of social circle, loneliness (Yang, 2001), lower self-esteem and life satisfaction (Ko, Yen, Chen et al., 2005), sensation seeking (Lin & Tsai, 2002), poor mental health (Yang, 2001; Young & Rogers, 1998), and low family function (Armstrong et al., 2000), the internet addiction may enhance anxiety and stress. Consistent with this suggestion in our study internet addiction was linked positively to anxiety and stress. These results indicate that the more addictive to the internet a student is, the more stress and anxiety he/she has. Studies indicate a relationship between PIU and procrastination. It has important implications. It implies that some people use the internet to cope with the stress. More specifically, involves cognitive task avoidance and engaging in activities with the implicit goal of distraction from the things that one is supposed to do (Davis, Flett, Besser, 2002). General procrastination is also related to negative affect and cognitive distortions with depressive and high perceived stress (Burka, Yuen, 1990; Ferrari, Johnson, McCown, 1995)

This study did not find any gender difference on Problematic Internet Use. Similar findings were found by Ceyhan (2007), Kim, Namkoong, Taeyun & Kim (2008), Oğuz, Zayim. Özel & Saka (2008). Internet appears to be narrowing the gender gap in the use of technology (Subrahmanyam, Kraut, Greenfield, and Gross, 2001). Subrahmanyam & Lin (2007) found no gender difference in the relationships between internet use. Male adolescents reported more loneliness in contrary to prior findings of no gender differences in adolescent loneliness (Brage & Mredith, 1993) as well as greater loneliness among females (Brennan & Auslander, 1979, Medora & Woodward, 1986; Woodward & Frank, 1988). One possible explanation for this is that with the commencement of chat and instant messaging has provided female adolescents with many avenues for social exploration and interaction which was previously unavailable to them thus making them less lonely (Subrahmanyam, Greenfield, & Tynes, 2004).

CONCLUSIONS

There was no difference between the males and females in relationships to internet use. The psychological variables like loneliness, depression, anxiety and stress were correlated to Problematic internet use. Internet was used by the adolescent to cope with stress by avoiding cognitive tasks and engaging in activities with the goal of distraction.

Limitations

- Participants were Junior college students from Science stream only hence it would be appropriate to conduct studies on a larger and heterogeneous sample.
- As correlational statistics were utilized, no definitive statements can be made about causality.

Suggestions

Parents, Teachers and other authorities should have a check and balance over internet use by students, so that they may be saved from the destructions caused by internet addiction. These may include:

- Counselling to help the adolescents to learn social skills and healthier ways of coping with uncomfortable emotions, such as stress, anxiety, or depression.
- Additionally, seminars and conferences and could be organised to highlight the negative consequences of problematic Internet use.

- Replacing Internet usage with healthy activities like practising yoga, exercising, meditation joining some team sports.
- Cognitive-behavioral therapy can help to stop compulsive internet behaviours change the perceptions regarding Internet, smartphone, and computer use.

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