Perceived Stress and Internet Addiction in male and female students

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Abstract

The aim of the study was to study internet addiction and perceived stress in college going students. A random sample of 100 students was collected. Analysis revealed significant difference in perceived stress and internet addiction in college going male and female students.

Keywords: Perceived stress and Internet addiction.

Introduction

The Perceived Stress is the measurement of the perception of stress; it is a measure of the degree to which situations in one’s life are appraised as stressful (Cohen et al. 1983).

The Nature of Stress

Around the year of 1960, Hans Selye proposed that stress is a part of the human condition. In 1990 the World Health Organization called stress “a global epidemic”. Psychological sources of stress may not only diminish one’s ability for adjustment, even have adverse effect on health.

Many people visits to physicians, as most of them, can be traced to stress-related illness. Stress is also now associated with an increased risk of various amounts of physical illness, ranging from digestive disorders to heart disease. Stress is a common part of life. In small quantities, stress can be good; it could motivate you and help a person in their productive activities. However, excessive stress, or a strong response to stress may prove to be harmful. How we perceive a stressful provoking event and after that how we react to it, can determine its impact on one’s health. We may get motivated or may feel depressed by the events in our lives, or we may see some as “stressful” and respond in a way that may create negative effect on our physical, mental, and social well-being. Initially, researchers drew attention on stressful events themselves, called stressors. In the United States, for example, people reported that money, the economy, work, family health problems, and family responsibilities are known to be their top five stressors (American Psychological
Appraisal of Stressors

Stress is the outcome of a person’s appraisal processes: primary appraisal occurs as a person is trying to understand what the event actually is and what it will mean. Events may have their appraisal for their harm, threat, or challenge. Secondary appraisals assess whether personal resources are in sufficient amount to meet the demands of the environment. When a person’s resources are more than sufficient to deal with a certain difficult situation, he or she may feel a little bit of stress and experience a sense of challenge instead.

The Physiology of Stress

Stress, as it engages psychological distress and leads to changes in the body that may create short- and long term consequences for our health. Two interrelated systems are majorly involved in the stress response. They are the sympathetic-adrenomedullary (SAM) system and the hypothalamic-pituitary-adrenocortical (HPA) axis.

- **Sympathetic Activation**: Events which are perceived as harmful or threatening, they are identified as such by the cerebral cortex, which, in turn, sets off a chain of reactions mediated by these appraisals. Information from the cortex is transmitted to the hypothalamus, which initiates one of the earliest responses to stress namely, sympathetic nervous system arousal. Sympathetic arousal stimulates the medulla of the adrenal glands, which, in turn, secrete the catecholamines epinephrine (EP) and norepinephrine (NE). These effects result in the merged-up feeling we usually experience in response to stress: increased blood pressure, increased heart rate, increased sweating, and constriction of peripheral blood vessels, among other changes. The catecholamines involved in the regulation of the immune system as well.

- **HPA Activation**

The hypothalamic-pituitary adrenal (HPA) axis is also activated in response to stress. The hypothalamus releases corticotrophin releasing hormone (CRH), which stimulates the pituitary gland to secrete adrenocorticotropic hormone (ACTH), which, in turn, stimulates the adrenal cortex to release glucocorticoids. Of these, cortisol is especially significant. It acts to conservative stores of carbohydrates and helps reduce inflammation in the case of an injury. It also helps the body return to its steady state following stress.
INTERNET ADDICTION

According to DSM V **Internet addiction** is defined as any online-related, compulsive behavior which interferes with normal living and causes severe stress on family, friends, loved ones, and one’s work environment. Various notions of tech addictions (Griffiths, 1996) and computer addiction (Shotton 1991) have previously been studied in England. However, as Internet Addiction was first introduced in 1996 at the Annual Meeting of the American Psychological Association (Young, 1996), that debate sparked a lot of controversy among both clinicians and academicians. From the previous decade, the conceptual terminology of Internet addiction has grown in of its acceptance as a justification of clinical disorder moreover frequently requiring treatment (Young, 2007). Many hospitals and clinics have become apparent with outpatient treatment services for Internet addiction, addiction rehabilitation centers have proclaimed new cases of Internet addicts, and further college campuses have started self-support groups to help those students who are addicted. Most recently, the American Psychiatric Association has included the diagnostic criteria of Internet addiction in the appendix of the *DSM-5* according to the previous research studies. Adolescents who were having problematic Internet use showed few symptoms of dysfunctionality in coping strategies with problems in school & home and showed worse conditions in interpersonal relations (Milani, Osualdella, & Di Blasio, 2009)

**REVIEW OF LITERATURE**

Some researchers gave suggestion that stress has evolved as a socio-cultural phenomenon, which may result into higher levels of self-reported stress due to the growth of information about stress in the popular culture (Moss & Lawrence, 1997). However, definitions of stress and conceptual framework of stress and coping remain diversified. Amidst the multitude of stress research, bundles of studies have examined stress among college students (Goldman & Wong, 1997; Humphrey & McCarthy, 1998; Ross, Neibling & Heckert, 1999). Students’ stress levels, the sources of this stress, stress related to self esteem and self-perception, stress and coping skills, and methods for handling stressful situations are just a few of the many issues that have been researched (Appelhans & Schmeck, 2002; Lent et al., 2001; Trockel, Barners, & Egget, 2000).

From a psychosocial perspective, the young college student who is still forming an individual identity, a process that includes attaining autonomy from parents, internalizing morality, forming a gender identity, and choosing a career (Newman & Newman, 1995). Sometimes, it is argued that stress is the outcome of an individual’s perceptions that they do not have the adequate resources to cope with a perceived situation from the past, present or future (Lazarus et al. 1984). Stress however is not a one-dimensional concept (Lazarus 1999) and some have proposed different types of stress. However, differences between individuals mean a situation regarded as stressful by one individual, may not be stressful for another (Omura 2007). Stress can be elastically defined as "the relationship between the person and the environment that is appraised by the person as taxing and endangering to his or her well-being" (McGowan et al. 2006, p. 92). Of the several types of stress that exist, there are two that play a part in this study: eustress and distress. These two types of stress can be defined as the positive and negative aspects of stress respectively " (McGowan et al. 2006). More specifically,
Eustress is a "positive psychological response to a stressor" whereas distress "a negative psychological response to a stressor" (Simmons 2000).

Babar et al 2004 found out that the most dominant stressors were that of academics and examinations. The subject of academic stress and college students has been in the limelight for several years. During every semester, at specific periods college students experience pressure due to academic engagements and responsibilities, economic hardships and inappropriate time management skills. If stress is negatively perceived, health and academic accomplishments can both be hampered, if stress levels are very high. (Campbell & Svenson, 1992). Womble, 2003 studied various factors that can deteriorate a student’s academic achievements. These factors included societal activities, job demands or romantic relationships which can take away valuable time. Stressors can promote a significant and important disruption on one's life, ranging from mild malfunctioning to severe physical and emotional illness (Mirowsky and Ross 1989).

The Internet is altering patterns of social communication and interpersonal relationships. This is nowhere more true than in the field of sexuality (Cooper, Delmonico, & Burg, 2000). Furthermore, sex is the most frequently searched-for topic on the Internet (Freeman-Longo & Blanchard, 1998). Young, Griffin-Shelley, Cooper, O'Mara, and Buchanan (2000) claim that the convenience of online pornography and adult chat sites provides an immediately available vehicle to easily fall into compulsive patterns of online use. Griffiths (1998) further considers Internet addiction to be a certain kind of technological addiction (such as computer addiction), and one in a subset of behavioral addictions (such as compulsive gambling). Kandell (1998) defined Internet addiction as “a psychological dependence on the Internet, regardless of the type of activity once logged on” (p. 12). Maladaptive patterns of Internet use do indeed constitute behavioral addiction when considered in terms of these definitions (Chou et al., 1999). An important research focus of Internet addiction is the problems caused by the Internet. In Brenner’s study (1997), 80% of nearly 600 respondents indicated at least five use-related problems such as failure to manage time, missed sleep, missed meals, etc., suggesting that such patterns as the norms. Some respondents reported more serious problems because of Internet use: conflict with employers or social isolation except for Internet friends troubles similar to those found with other addictions. Durkin (1997) identifies four possible ways that pedophiles might misuse the Internet. They suggest that it can be used to traffic child pornography, locate children to molest, engage in inappropriate sexual communication with children and communicate with other paedophiles. They also suggest that pictorial child pornography, such as that available on the Internet, can be used as a tool in child molestation. This is similar to the arguments raised about pornography per se. Cooper et al. (1999) also suggest that 'cybersex' allows an individual to operationalize sexual fantasies that would otherwise have self-extinguished if it were not for the immediate feedback provided by on-line interactions.

Wilkinson (1998) suggests that white college educated middle-class males are engaged in the usage of Internet more than other groups. African Americans are more likely to use the web at school, and whites are more likely to use the web at work (Novak & Hoffman, 1998). Whites are more likely to have ever used the web as compared to African Americans and whites are significantly more likely to have ever used the web at home. According to Yan (2009) only a small bunch of adolescents and adults have a correct understanding of the Internet. The addictive element may be the search for stimulation through interactive services, or the Internet may serve the purpose
of an escape from real-life difficulties. Researchers studying the various problems related to Internet use have adopted different terminologies such as Internet addiction, Internet addiction disorder, Internet dependence, problematic Internet use, or pathological Internet use to describe the negative effects of excessive Internet use on personal lives (Chen et al. 2004; Chou and Hsiao 2000; Davis 2001; Goldberg 1995; Griffiths 1998; Kandell 1998; Morahan-Martin and Schumacher 2000; Scherer 1997; Shaffer 1996; Young 1998a). As the percentage of Internet users in the population growing, there is concern about the social impact of its use. A number of potential negative outcomes of Internet exposure have been suggested, such as addiction (Brenner, 1997; Griffiths, 1999), social isolation (Kraut et al., 1998), lack of involvement in prosocial behavior (Funk and Buchman, 1996), and poor school performance (Wiegman and van Schie, 1998). Psychologists and educators are aware of the severe negative impact from excessive use and related physical and psychological problems (Griffiths & Greenfield, 2000). Users who spend a significant amount of time online often experience academic, relationship, financial, and occupational difficulties, as well as physical impairments (Chou, 2001). Some researchers (Brenner, 1997; Nie & Erbring, 2000) have even connected internet use with an increase in psychological difficulties such as depression and loneliness.

Yang and Tung (2007) found that the likelihood of Internet abuse was higher for vocational high school students compared to other high school students.

Objective

(i) To see the difference between male and female students with respect to perceived stress.

(ii) To see the difference between male and female students with respect to internet addiction.

(iii) To see the relationship between perceived stress and internet addiction in male college going students.

(iv) To see the relationship between perceived stress and internet addiction in female college going students.

Hypotheses

(i) There would be a significant difference between males and females with respect to perceived stress.

(ii) There would be a significant difference between males and females with respect to internet addiction.

(iii) There would be a relationship between perceived stress and internet addiction in male college going students.

(iv) There would be a relationship between perceived stress and internet addiction in female college going students.
Participants
The sample taken was 50 female college going students and 50 male college going students from respective universities within the age range of 18-24. A random sampling technique was used to draw the sample from the population.

Tools

(i) **PSS (Perceived Stress Scale):** The *Perceived Stress Scale* (PSS) developed by Sheldon Cohen.

(ii) **Internet Addiction Test (IAT):** It is a reliable and valid measure of addictive use of Internet, developed by Dr. Kimberly Young.

Statistical Technique:
Statistical techniques used were descriptive statistics, inferential statistics such as T-test and Pearson Product Moment Correlation.

Result and data analysis:

Table 4.1: Mean Scores (Standard deviations) of Perceived Stress and Internet Addiction in Males and females.

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived stress</td>
<td>Males</td>
<td>50</td>
<td>19.3200</td>
<td>19.3200</td>
</tr>
<tr>
<td></td>
<td>Females</td>
<td>50</td>
<td>22.9800</td>
<td>14.93809</td>
</tr>
<tr>
<td>Internet addiction</td>
<td>Males</td>
<td>50</td>
<td>50.5800</td>
<td>14.93809</td>
</tr>
<tr>
<td></td>
<td>Females</td>
<td>50</td>
<td>37.1800</td>
<td>14.06645</td>
</tr>
</tbody>
</table>
Table 4.2 showing the t-values of male and female students with respect to perceived stress and internet addiction.

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>T</th>
<th>Df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived stress</td>
<td>2.323</td>
<td>98</td>
<td>.022</td>
</tr>
<tr>
<td></td>
<td>2.323</td>
<td>97.54</td>
<td>.022</td>
</tr>
<tr>
<td>Internet addiction</td>
<td>4.618</td>
<td>98</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>4.618</td>
<td>97.64</td>
<td>.000</td>
</tr>
</tbody>
</table>

Table 4.3 shows the correlation among males with respect to perceived stress and internet addiction.

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>P.S Pearson Correlation</th>
<th>Sig. (2-tailed) N</th>
<th>LA Pearson Correlation</th>
<th>Sig. (2-tailed) N</th>
</tr>
</thead>
<tbody>
<tr>
<td>PS</td>
<td>1</td>
<td>.120</td>
<td>50</td>
<td>.120</td>
</tr>
<tr>
<td>Sig. (2-tailed) N</td>
<td></td>
<td>50</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>.120</td>
<td>.406</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>50</td>
<td></td>
<td>50</td>
<td></td>
</tr>
</tbody>
</table>
Table 4.4 shows the correlation between perceived stress and internet addiction among females.

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>P.S</th>
<th>LA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived Stress Correlation Sig. (2-tailed) N</td>
<td>Pearson</td>
<td>.857</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>.000</td>
</tr>
<tr>
<td>Internet Addiction Correlation Sig. (2-tailed) N</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>.857</td>
<td>1</td>
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**Discussion**

The findings of the present study perceived stress and internet addiction among males and females college going students shows that there is a significant difference between male and female college going students. The mean score of perceived stress of the female college going student found to be higher than males mean score. The probable reason of this condition may be because in Indian culture the women are suppressed due to certain myths connected to it. As women are in most of the states in India considered as goddesses as they are only born to take care of her child and husband after marriage. They are considered more responsible towards household chores and decision related to household finances. They are suppressed under home even if they have the better capability and intelligence to work outside than males. It is not only limited to household matters but even to those women who are working in certain industries, in most of the industries and other workplace centers, women are often molested, harassed, and even they are being paid less than the men.

The findings of mean scores in internet addiction of male students found to be more than female students, as the probable reason may be that in Indian culture the male dominance is commonly seen everywhere, whether it is an office setting, or in households. So, the males who are being born and raised in this society consider themselves to be free and have almost free access everywhere. As most of the males work outside their home, so they use internet more for their work purposes and for an entertainment source also.

The strength between the correlation of perceived stress and internet addiction in male college going students is very low at the rate of 1 and 0.120.

The findings of the relationship between perceived stress and internet addiction found to be significant at 0.01 correlation level in female college going students, as the probable reason could be as per the various researches conducted it was found that women suffers from more stress than the men, as they need a company to share their feelings to someone, and if they are not able to do so, they take internet as a source to release their tensions. And their addiction towards internet usage increases when they feel stressed.
Conclusion

It can be concluded thus that there is a significant difference among male and female college going students. There is also a significant correlation between perceived stress and internet addiction among females.

References


10.) Pariat, M., Rynjah, M., & Kharjana, M. G. (August 2014). Stress Levels of College Students: Interrelationship between Stressors and Coping Strategies. IOSR


