# Problematic Internet Use and Psychological Problems (Depression and Loneliness) Among Tanta University Students.

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# **ABSTRACT**

In the last few years, Problematic Internet Use has become a serious mental health problem, particularly among the young people between ten and twenty-six years old. The earliest and recent studies reported link between overuse of the internet by adolescent and young adults and negative effect of psychological wellbeing. Aim of the study: This study aimed to investigate the extent of Problematic Internet usage among Tanta university students and examine the relationships between Problematic Internet Use and depression and loneliness among Tanta university students. Design: The study followed the descriptive design. Setting:- Different faculties of Tanta University. Subject: The target population of this study consisted of 300 participants who were chosen randomly among Tanta university students. Tools: In the collection of data of this study, Internet Addiction test (IAT), Beck Depression Inventory (BDI)and UCLA loneliness scale have been used. Result: Findings have demonstrated that about one third of the participants can be characterized as " Problematic Internet Use. Additionally, there is positive significant relationship among Problematic Internet Use and depression and loneliness in which the studied university students who have a higher frequency of Internet usage are more likely to be lonely and depressed. Recommendation: The study recommended that it should be given more attention to educate students about internet usage habits and psychologists must be aware of this newly emerging disorder as a internet addiction and they should be able to apply the appropriate therapeutic interventions.

**Key words**: Problematic Internet Use, loneliness and depression

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# INTRODUCTION

In the last few years, Problematic Internet Use has become a serious mental health problem, particularly among the young people between ten and twenty-six years old (Lavaco et al 2008). Problematic Internet Use is associated with negative detrimental effects on behavior and compromises one or more aspects of a person's life including their personal relationship, health, psychological wellbeing, job, education and personal hobbies (Widyant &Griffiths 2011).

The internet is a new tool that is evolving into an essential part of everyday

life all over the world and its use increases especially among voung (Erdogan2008) &(Adaher & Ballkan 2012). Egypt is a perfect example of this, just five years ago only a very small number of people in the country had access. This has now changed and most people can get online, although only about a quarter of the population do it regularly (Reda etal. 2013). Worldwide, prevalence of excessive internet use among young adults has been observed to range between 2% and 11%. Current US data suggests that 93% of adolescents and adults between the ages of 12and 29 years go online(Campbell etal., 2006) & (Shaw& Gant 2002). In Egypt, more than 80% of

internet café clients were young people, 60% of the youth surveyed spent their time chatting, 20% browsing pomographysites, 12% conducting business or scientific work and 8% visiting political sites (MCIT 2010).

Inspite of the widely perceived merits of this tool, psychologists and educators have been aware of the negative impacts of its use, especially the over or misuse and the related physical and psychological problems. One of the most common of these problems is Problematic Internet Use(Kruate etal., 1998) & (Elisheva 2004). Problematic Internet Use discussed by many researchers with different concepts, " Internet Addiction", " Internet Dependency ", "Pathological Internet Use ", Excessive internet use, Internet Abuse ", "Cyber Addiction " or " Obsessive Video Game Playing (Yong etal., 2000) & (Weiser 2001) & (Morgan & Cotton2003). Young 1996 described Internet addiction as an impulse control disorder that does not involve the use of an intoxicating drug and is very similar to pathological gambling (Young 1996). Additionally, Davis et al., 2002 stated that problematic internet use is a psychiatric condition which involves maladaptive thought and pathological behaviors ( Davis etal., 2002). Symptoms often identified were a preoccupation with the internet, an inability to control use, hiding or lying about the behavior, psychological; withdrawal and continued use despite consequences of the behavior (Weiser2001) & (Young2007). Furthermore, since the concept of Internet Addiction has gained credibility among mental health professionals both in academic and clinical realms ,this new found malady is currently suggested by psychologists to be merit inclusion into the 5th edition of the of the Diagnostic and Statistical Manual of Mental Disorders (DSM-V) as compulsive and impulsive use of the Internet fulfills the criteria as a disorder (Young 1996).

The relationship between psychological wellbeing and internet usage is an enduring question in computer mediated communication research. Internet use may be beneficial or benign when kept to normal level however a relatively early study by Kraute and associates (1998) seemed to set the tone for much of the research that would follow. They found that the use of the Internet appeared to increase loneliness ,depression and stress. They called this the " Internet Paradox 'in that technology that theoretically would increase communication, could instead have negative social and psychological effects (Kruate etal., 1998). In the same stream, kim et al (2009) found that abuse of and dependence on the Internet was associated with depression and lower levels of face-to-face interaction (kim et al 2009).

Due to the explosive growth of the internet use among young adults globally, it may not be surprising that research on Problematic Internet Use (PIU) in this population has received intense national and international attention. There has been increased interest in addictive potential of the internet and the effects this can have on psychological well being.

Therefore this study was initiated in light of the relatively high prevalence of Egyptian Internet users coinciding with the new era of Problematic Internet use allover the world. Dysfunctional use of such technology probably leads to changes in the psychological profiles of the young population and may interfere with the person's social life, school work, or jobrelated tasks at work, enhancing

withdrawal from the real world, and at certain occasions constituting a predisposing factor for the appearance of psychiatric disorders.

#### **Materials and Method**

#### Aim of the study:

This study aimed to :-

- Investigate the extent of Problematic Internet use among a sample of Tanta university students.
- Examine the relationship between Problematic Internet use and loneliness and depression among a sample of Tanta university students.

# Research question

"Is there any statistical meaningful correlation between Problematic Internet Use tendency and depression and loneliness among Tanta university students?

# Research design

The study followed the descriptive corelational design. The descriptive type of research was carried out via the descriptive type and it is in accordance with associational research model. This type of research aims to evaluate the degree and the variation between two or more variables.

#### **Setting**

Faculties of Medical campus; Medicine ,Pharmacy, Science ,and Nursing faculties.

#### Sample

The target population of this study consisted of 300 participants who were chosen randomly from Tanta university

students who meet the following inclusion criteria:-

- -Age between 18-24 years.
- Internet users.

## Tool of the study:-

In the collection of data of this study, Internet Addiction Test (IAT), Beck Depression Inventory (BDI) and UCLA loneliness scale have been used.

TOOL 1 :- Internet Addiction Test (IAT)

Internet Addiction Test (IAT) was developed by **Young** (,1996). It can be used to screen for internet abuse among adults and adolescents. The IAT is a 20 items questionnaire on which the person is asked to rate the items on a 5 point scale with 1= rarely to 5= always. The 20 items of Internet Addiction Test (IAT) are calibrated scores ranging from 1 to 5 and given a total score ranging from 20 to 100). It classifies internet users into three groups:-

- Average Users who have complete control over their internet activities :- 20-49 score ( normal use)

-Problematic users who experience frequent problems due to their internet activities:- 50-79 score (moderate use)

-Internet addicts who experience significant problems due to their dependence on internet activities:- 80- 100 score.(severe use)

#### Tool 2:- UCLA Loneliness Scale

The UCLA Loneliness Scale was developed by **Russell (1996)** to assess subjective feelings of loneliness or social isolation. This scale includes 20 Likert-type questions on a four-point Likert scale, this 20 item scale asks participants how frequently they agree with statements such

as ""I feel left out," "I am no longer close to anyone," and "My social relationships are superficial.". Agreement is measured on a four-point Likert scale ranging from 1=strongly disagree and 4=strongly agree.

# Tool 3:- Beck Depression Inventory(BDI)

Beck Depression Inventory, also called the Beck Scale of Depression, it was designed and named after it's creator, **Aaron Beck 1961.** 

Beck Depression Inventory is a questionnaire consisting twenty-one questions that have been developed to discover and interpret the signs and symptoms of depression, that each have possible four answers to select from. Participants taking Beck Depression Inventory have to choose one answer from the four choices rendered. Scores range from zero, which denotes the least degree of severity of symptoms, and a score of three, which describes the severity.

The total score of the scale ranges from 0 to 63 and classified as following:-

-Scores between 0 and 9 are indicative of people experiencing minimum symptoms of depression.

-Scores between 10 and 16 are indicative of people experiencing minor symptoms of depression.

-Scores between 17 and 29 are indicative of people experiencing average levels of symptoms of depression.

-Scores between 30 and 63 are indicative of people experiencing major or severe form of depression.

#### Method

# Administrative process

- An official letter was addressed from the dean of the faculty of nursing to

the dean of the identified study settings to request their permission and cooperation to collect data in the selected setting.

# Validity and reliability

- The tools of the study were translated by the researchers to Arabic language and were validated by a jury to ensure the content validity of the translated version by original one . The jury consisted of nine experts in the psychiatric medicine and psychiatric nursing fields. The required correction and modifications were carried out accordingly.

-Tools of the study were tested for reliability . Test-retest reliability was applied on 10 studied subjects and reapplied after 2 weeks to ascertain the reliability (r= 0,83 - 0,86 -0.85, respectively).

## - Pilot study:-

A pilot study was carried out on 30 students to test the clarity, applicability, and feasibility of the tools and to estimate the approximate time needed to fill in the studied tools as well as to find out any problem or obstacle. These participants were selected and excluded later from the actual study sample. It took nearly 10 days. After its implementation and according to its results, the necessary modifications were made.

# - Actual study

- In actual study every participant was invited to participate in this study on a voluntary basis .The questionnaires were handed out by the researcher and the participants were asked to fill in the questionnaires individually in the presence of the researcher . It was emphasized that the tools should be filled in on an individual level. The time required to fill the questionnaire ranged from 20- 25

minutes .Data was collected through the first trimester of 2013-2014 academic year.

#### **Ethical consideration**

Participants were informed about the purpose of the study and oral consent to participate in the study was obtained before inclusion . The participants were assured that completion of the questionnaires was anonymous and there was a guarantee of confidentiality and they were informed that

they have the right to withdraw at any time from the study .

#### Results

The participants of the study consists of the students at Tanta university, the sample consisted of 300 university students. of the participants 16.33% were female, and 83.67% were male. Their age were ranged from 18-24 with the mean  $age19.7261\pm.514$ 

Extent Internet Usage among the studied university students by using Internet Addiction Test illustrated in Table 1, it was noticed that about one third of the participants students can be characterized as "Problematic Internet Use (25.66% of participants were risky internet users and 7.66% of the were internet addicts).

Table 1: The Extent Internet Usage among The Studied University Students by Using Internet Addiction Test

| Extent Internet Usage           | The Studied University Students N=300 | %     |
|---------------------------------|---------------------------------------|-------|
| No Problematic use (Normal use) | 200                                   | 66.66 |
| Problematic use (Moderate use)  | 77                                    | 25.66 |
| Internet addicts (Severe use)   | 23                                    | 7.66  |

Table 2 shows the mean scores of Internet Addition Test , loneliness and Beck Depression Inventory, it was found that mean score of internet addiction inventory was  $39.55\pm16.29$  with the maximum scoring 88. Meanwhile mean scores of both loneliness and depression scales was  $(44.66\pm10.19~\&17.95\pm8.80)$  respectively.

Table2:-Mean and Standard Deviation of Studied University Students for Internet

Addiction Test, UCLA Loneliness Scale and Beck Depression Inventory

| Scales                  | Minimum | Maximum | Mean  | SD    |
|-------------------------|---------|---------|-------|-------|
| Internet addiction test | 20      | 88      | 39.55 | 16.29 |
| Loneliness              | 23      | 76      | 44.66 | 10.19 |
| Depression              | 1       | 41      | 17.95 | 8.80  |

As regards the correlation between Internet Addition Test and depression and loneliness at the .05 level as presented in table 3 , the findings revealed that Internet addiction (problematic internet use ) positive significantly correlates with loneliness and depression at the .05 level (r=0.140; p<0.05; r=0.296; p<0.05) respectively in which the studied participants who have a higher frequency of Internet usage are more likely to be loneliness and depressed .

 $\begin{tabular}{lll} Table & 3:-Correlation & between & Internet & Addiction & Test & and & UCLA & Loneliness & Scale \\ and & Beck & Depression & Inventory & . \\ \end{tabular}$ 

| Internet       | R       | UCLA Loneliness Scale<br>0.140 | Beck Depression Inventory<br>0.296 |
|----------------|---------|--------------------------------|------------------------------------|
| Addiction Test |         | 31113                          | 0.200                              |
|                | P-value | <0.015                         | 0.000                              |

#### Discussion

High levels of internet use which interfere with daily life have been linked to a range of problems, including decreased psychosocial well-being ,relationship breakdown and neglect of domestic, academic and work responsibilities (Weiser 2001) & (Widyanto McMurran 2004). Given the recent expansion and the expected increase in internet availability and usage in the coming years, it is important that healthcare professionals be informed about this behavior and its associated problems; Problematic Internet Use is a newly emergent disorder. It has been found to be associated with a variety of psychiatric disorders as well as, subjective distress and functional impairment (Yong2000) & (Davis etal., 2002).

The aim of this study was to investigate the extent of Internet use and examine the relationship between Problematic Internet use and loneliness and depression among Tanta university students. Findings of the present study have demonstrated that about one third of the participants can be characterized as " Problematic Internet Use (25.66% of participants were risky internet users and 7.66 % of the were internet addicts). Additionally ,the findings revealed that ,there was positive significant relationships among the studied variables (problematic internet usage depression and loneliness) in which the participants students who have a higher frequency of Internet usage are more likely to be loneliness and depressed . Similar findings were reported by many researchers who have been linked internet use with an increase in psychological difficulties such as depression and loneliness among university students; Morahan-Martin and Schumacher (2000) investigated relationship between Pathological Internet Use (PIU) and depression and loneliness among 277 undergraduate students. They found that loneliness and depression were associated with pathological use. Also, Boneberke (2002) studied 371 British college students and found that pathological Internet users reported more academic. perceived social interpersonal problems as well as lower self-esteem. The results of the present study were also in harmony with the study of Koc (2011), who examined Internet Addiction and loneliness, results indicated that 34% were addicted to the internet and that internet addicts were more likely to be lonely. In the same direction, recent study carried by Adaher & Ballkan (2012) indicated that internet addiction tendency is related with psychological symptoms such and loneliness among as depression university students in North Cyber. In this respect, Beard 2002 & Widyanto & McMurran, 2004 have noted that heavy Internet users seem to be alienated from normal social contacts and may even cut these off as the Internet becomes the predominant social factor in their lives. On the national level ,in Egyptian study carried by Reda et al., (2013) on psychological effects of the internet among young people, the study revealed that Egyptian young adults were at high risk for problematic internet use and to a lesser extent internet addiction and adolescents with problematic internet use were more prone to psychiatric disorders. So, from the results of the present and previous studies, it is obvious that regardless of the place where the study is conducted, studies on internet addiction demonstrated that internet addiction correlate positively to depression and loneliness.

In attempts to understand correlation, we can assume the negative psychological effects of Internet use may results from two factors: first there is a displacement of social activities where the individual ends up spending so much time online that he\she is unable to participate in face to face social activities. Indeed, excessive internet use can displace valuable time that people spend with family and friends, which leads to smaller social circles and higher levels loneliness and depression. The second factor is the displacement of strong ties with the surrounding peoples. Lack of strong ties can result in loneliness and feelings of isolation. That is, the quality of online relationships is of a lower quality than face to face relationships. In this respect Moody (2001) emphasized that, when one engages in a large number of online relationships, they may take the place of stronger face-to-face ones. Thus, Internet use isolates individuals from the real world and deprives them of the sense of belonging and connection with real world, thus loneliness can be a product of excessive internet use because users spend time online .often investing in on line.

Second part of the findings of the present study is that about one third of the participants can be characterized as " Problematic Internet Use". This result is supported by Galci & Gulnar' (2009), they found 23.2 % of the university students in the study are internet addicts and 28.4 % are risky internet users. In this domain, several studies have been done to understand the reasons for excessive use of the net. The anonymity may be one of the principal elements, because the users feel the freedom to change their own identity, in fact an internet user can take a different profile, when he\she is on line and chooses an identity what represent an ideal self, the opposite of real identity. The individual tends to substitute the real world with an artificial object, such as a kind of "technological fetishism" he/she tries to construct his/ her own personal " virtual" using different attitudes behaviors compared to those present in real life. Another assumption of this excessive use of the net is stated by Griffith (2000) who stated that the participants' use of internet is highly associated with its perception as a copying 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 away for the compensation of theses negations and increasing internet use may turn into a dependent relationship. In other words, Padwa & Cunningham (2010) state that internet use may emerge as a way in which Individuals make up perceived deficiencies and have a positive evaluation of self. Full encouragement from faculty members to students university for internet usage for the purpose of scientific research and availability of internet access in the faculties of Tanta university may be another attribution to the findings of the present study.

Beside the previous reasons for excessive use of the internet, the Egyptian society may be have additional causes such as, the Egyptian society may be not fully aware of the risks that are associated with internet usage by young age. For the economic causes, most of parents spend long of the time out the home which may have negative consequences such as; using the internet by their sons away from any parental supervision and there is no a

valuable time that parents spend with family may lead to sons use internet to seek emotional support and seek someone listens to them .So social media networks for them consider as a means of self expression and social interaction with others and it is a pleasurable way to spend their time. Spreading the cyber clubs by unusual way and without rules in Egyptian society may be other cause, in some extent we can find two or more cyber clubs in the same area. Today, the cyber clubs become a door to serious problems among young adults such as risk behaviors. revolution of mobile technology may be another cause for the excessive use of the internet which leads to access to the net service at any time and any place very easy. According to latest statistics about Face book in Egypt, total Face book users have exceeded 7 million users with a penetration of population 9.76%. Most of Face book users are aged between 18-24 years old (40%), the second largest age group is 25-34 years old (29%). (MCIT (2010).

From the above, it can be assumed that, the internet use among participants studied in particular and may be in university students in Egypt may be attributed to many factors such as difficulty adapting to life, away from home, newly experienced freedom from parental intervention, free internet access, huge blocks of unstructured time, no monitoring of what they express on line and the most important factor is full encouragement from faculty members for internet usage.

#### Conclusion

The present study illustrated that Problematic Internet Use affects depression and loneliness directly among studied participants in which students whose high score in internet addiction were more likely to vulnerability to depression and loneliness.

#### Recommendations

- Before full encouragement from faculty members for internet usage, they should be given more attention to educate students about internet usage habits and provided them with recommended internet websites.
- Strategy can be done for screening students who are at risk for Problematic Internet Use.
- -Psychologists must be aware of this newly emerging disorder as a Problematic Internet Use and they should be able to apply the appropriate therapeutic interventions ...
- Media should be interested by Problematic Internet Use and increase awareness of the society and particularly parents about this emerging new problem.

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