

Association Between Internet Overuse And Mental Health In Hadhrmout University Students

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Abstract:

Background:

To examine the association between internet overuse and mental health in Hadhrmout University of Science and Technology students.

Methods:

A representative sample of 461 students selected by a multistage sampling method were requested to fill a self administered questionnaires about internet use and socio-demographic characteristics. Psychopathology was assessed using the Self-Reporting Questionnaire (SRQ).

Results:

A majority of our respondents (87.2 %) were Internet users. 29.8 % reported spending more than two hours per day online. There was a significant association between internet overuse and students' mental health (O.R. = 1.86, 95% C.I. = 1.19-2.92).

Conclusions:

These results add to a growing body of evidence documenting the associating between mental health and internet overuse. The University of Hadramaut health and student affairs professionals, particularly those involved with mental health issues, need to become more aware of the side-effects of inappropriate internet usage.

Keywords:

Internet overuse, Depression-anxiety, Hadhrmout University.

الملخص:

التنامي المتزايد للانترنت في السنوات الأخيرة أدى إلى ظهور كثير من الجوانب السلبية لإستخداماته وبالذات في فئة المراهقين والشباب.

يهدف هذا البحث لدراسة العلاقة بين الاضطرابات النفسية (الاكتئاب والقلق) لطلاب جامعة حضرموت والساعات التي يقضونها يوميا على الانترنت. وقد أجريت هذه الدراسة على عينة عشوائية متعددة المراحل (461 طالبا).

وأستخدم استبيان التقييم الذاتي (SRQ) لقياس الاضطراب النفسي. وقد أوضحت نتائج الدراسة ان هناك ارتباط ذو دلالة إحصائية بين الصحة النفسية للطلاب وفترة استخدامه الانترنت. إذ أن أولئك الذين يقضون ساعات أطول في اليوم على الانترنت لديهم اضطراب القلق والاكتئاب تقريبا مرتين أكثر من الذين يستخدمون الانترنت لفترة قصيرة.

وهكذا تدعم نتائج هذه الدراسة نتائج دراسات في دول أخرى ومن ثم ينصح بالمهتمين بالصحة النفسية للطلاب في الجامعة بالاهتمام بهذا الموضوع والعمل على زيادة الوعي لدى الطلاب حول الجوانب السلبية للاستخدام السيئ للانترنت.

Introduction:

The positive and negative effects of Internet and computer use have been the center of much current controversy. The Internet provides a new medium of communication that enables us to gain access to vast amounts of information on a broad range of topics. Many consider the fantastic growth of the Internet to be one of its most valuable assets. The growth rate for the Internet has been proliferating year by year, with approximately 1.11 billion users in 2007, 1.67 billion in 2009, 1.97 billion in 2010, 2.40 billion in 2012 and 3.83 billion in 2017, ⁽¹⁾ indicating an upward trend in the number of digitally literate people. The seemingly endless growth of the Internet has not been completely without controversy. Anecdotal evidence suggests that problems of harassment, stalking, and pornography related to the Internet have been increasing. Researchers have begun to explore these problems, as well as the consequences of excessive Internet use; terms, such as *Internet addiction*, *Internet dependence*, and *pathological computer use*, have appeared. ^(2,3,4)

The internet is a tool for university students to acquire new information, make contact with various social groups, and expand personal relationships. The majority of college students are Internet users. University students may be particularly susceptible to problems related to Internet use, and specifically, to excessive Internet use. Colleges provide students with the ability to access the World Wide Web (WWW), as well as e-mail and related Internet activities.

According to Kandell (1998), many different factors influence the likelihood that college students may become dependent on or overuse the Internet.

⁽²⁾Accessibility to the Internet is clearly a factor in this overuse. The internet is highly addictive, and it can be abused by anyone. ^(5,6)

In a study of a college population, Scherer (1997) found that 13% of college Internet users fit her criteria for Internet dependence. In this survey of 531 students at a large public university. Interestingly, Scherer also noted that a very small percentage of Internet users perceived their online use to have a negative impact on their lives.⁽⁴⁾ In another study, Welsh surveyed a one-campus sample of 1,000 college students and found that 8% fit the criteria for dependence. Welsh also revealed that students had difficulty identifying the negative consequences of excessive Internet use, just as they did with problems resulting from binge drinking on campus.⁽⁷⁾ Some campuses have reported

an increase in academic failure that can be directly linked to excessive Internet use. Excessive use is also related to difficulty in maintaining real-life interpersonal relationships, developing sleep problems, and reducing everyday activities. The Internet has been connected to other problems as well. Longer use of the Internet was associated with declining social involvement and increasing depression. ⁽⁸⁾ Other risks of Internet use include the exchange of pornography, online gambling, credit-card debt as a result of excessive online purchasing, and social isolation secondary to excessive amounts of time spent online. With these factors in mind, one might conclude that college students could be more susceptible to overusing or becoming dependent on the Internet.

The objective of this study was to assess the association between internet overuse and mental health specifically anxiety and depression in the university of hadramaut students.

Methodology:

Study design, site, subject and procedures

This is a cross-sectional study. The sampling frame was all students attending Hadramout University in Mukalla city in the 2012/2013 academic year. Using a multistage sampling method, a representative sample of 461 undergraduate students were selected to participate in this study. First, 4 colleges were selected randomly out of 9 colleges (the total number of colleges of the university). Second, one level from each departments of these colleges were selected by simple random selection. Third, a total sample of 461 students were selected using simple random procedure and invited to participate. Those students who agreed to participate were asked to complete a questionnaire about socio-demographic background, plus the Self-Reporting Questionnaire (SRQ). Response rate were 96%.

The study was ethically approved by the department of community medicine, College of Medicine, Hadramout University.

Data collection:

Measures Internet access questionnaire.

Internet use was assessed by asking participants about their access to the Internet, the total time they spent online, and where they typically accessed the Internet (e.g., home, school, internet café). A pretest was conducted on students from Hadramout University in order to insure face validity of the questionnaire.

Student mental health was assessed from the SRQ completed by the students. The Self-Reporting Questionnaire (SRQ) was originally developed by the WHO as a screening research instrument for the detection of psychiatric morbidity across different cultures.⁽⁹⁾ It consists of 20 short questions that require a yes or no response, depending on the presence or absence of symptoms. The respondent is considered to be a potential psychiatric case if the total number of “yes” answers reaches a certain value (cut-off point). A cut-off point between six and seven was used in this study. This cut-off point was found to yield a sensitivity of 93%, a specificity of 70% in a study conducted to assess the validity of the Arabic (SRQ) as a screening instrument for psychiatric morbidity in a sample of Saudi patients.⁽¹⁰⁾

Potential relevant socio-demographic factors were assessed from the interview with the student. these include place of living (rural, urban), residency during study (in a hostel, with friends, with the family) and whether he chews Qat or not.

Mothers' and fathers' level of education was grouped into the following four categories: illiterate, primary school, secondary school and university level and treated as a continuous variable.

Results:

Table 1 shows that of the 444 students who agreed to participate, A majority of our respondents (87.2 %) reported having access to the Internet, with 50.4% reporting home Internet access. Nearly one third of the participants (29.8 %) reported spending more than two hours per day online.

Table 1: Characteristics related to internet use.

Sample Characteristics	frequency	Percentage
Using internet (N=444)	Yes	88.5% (393)
	No	11.5% (51)
Duration (N=393)		
	< one year	13.2
	1-2 years	18.8
	2-3 years	19.9
	> 3years	48.1
Hours per day (N=393)		
	< 2hs	70.2% (279)
	≥ 2hs	29.8% (117)
Place of access (N=393)		
	Home	50.4% (198)
	Outside home	49.6% (195)

Table 2 shows that nearly two third of the sample (70.9%) were male. About one third (33.6%) of the students had depression and anxiety disorders. Most of the students 65.9% were urban while 34.1% were rural. Most of the mother of the students were illiterate or having primary educational level (79.9%), while nearly half of the fathers of the students (48.7%) were illiterate or having primary educational level. Only 7.4% of the students' mothers had the university educational level while 24.3% of the students' fathers had the university educational level. Nearly one fifth (18%) of students were chewing Qat.

Table 2: General Characteristics of study population.

Sample Characteristics	Value	Proportion
Gender(N=444)	Males	70.9% (315)
	Females	29.1% (129)
Depression/anxiety problems (N=443)	No	66.4% (295)
	Yes	33.6 % (149)
P. Residency (N=443)	Rural	34.1% (151)
	Urban	65.9% (292)
Residency during study. (N=443)	With the family	45.8% (203)
	Hostel	40.9% (181)
	Others	13.3% (59)
Mother education (N=444)	Illiterate	39.9%(177)
	Primary	39% (175)
	Secondary	13.7% (61)
	University	7.4% (33)
Father education (N=444)	Illiterate	12.2% (54)
	Primary	36.5% (162)
	Secondary	27% (120)
	University	24.3% (108)
Qat use (N=444)	No	82.2% (365)
	Yes	17.8% (78)

Table 3: Bivariate associations between student's mental health (depression and anxiety disorder) and sample characteristics

Variables	Odds ratio (95% CI)
Lowest mother education (per point on 4-point scale)	1.1 (.89-1.36)
Lowest father education (per point on 4-point scale)	.98 (.80-1.20)
Using internet	1.30 (.72 - 2.34)
Less than two hours per day	1.86** (1.19-2.92)
Home access	.79 (.52 - 1.21)
Rural	.91 (.60 - 1.37)
Residency with family	.91 (.68 - 1.21)
Not using Qat	1.35 (.82 - 2.23)

**p < .01

Table 3 demonstrates that Internet use was strongly associated with students mental health (O.R. = 1.86, 95% C.I. =1.19-2.92). there was no significant association between students' mental health and fathers' or mothers' level of education . There were no significant associations between student's mental health and the other sample characteristics. So there is no need to conduct multivariate analysis.

Discussion:

This study aimed to examine the association between overuse of the Internet and mental health (anxiety and depression), in a representative sample of students in Hadhramout University of Science and Technology. Result of the current study showed that students who overuse internet were nearly two times (O.R. = 1.86) more likely to have depression and anxiety. Due to the cross-sectional nature of the present study, no conclusion regarding the direction of effect can be drawn. Are students who overuse the internet develop mental health problems, or is depression/anxiety disorder lead students to overuse internet? A longitudinal study design or an interventional trial is needed to answer such questions. This finding is consistent with previous reports. For instant, Ferraro et al (2007) found that longer use of the Internet was associated with declining social involvement and increasing depression.⁽¹¹⁾ Milani et al.(2009) concluded that internet overuse generally causes depression, anxiety, and a sense of isolation, thus a considerable number of individuals with internet overuse experience stress and exhibit low self-esteem.⁽¹²⁾ It has been observed that the rates of depression, stress, and suicidal ideation increase as internet overuse becomes more serious.^(13,14) In a longitudinal study (Lawrence & Peng, 2010) found that overuse of the internet generally was detrimental to the mental health of young people. Particularly, overuse of the Internet at baseline is predictive of depression at the 9-month follow-up. After adjusting for potential confounding factors, there was an increased risk of depression for those who used the Internet pathologically by 2.5 times compared with those who did not exhibit the targeted pathological behaviors.⁽¹⁵⁾

Some limitations of this study must be considered. First, it is possible that the results of this study are not generalisable to all young adults outside the university. Second, the number of variables examined was limited. Future research should seek to include types of activities and web pages students visit on the internet rather than the duration of internet use

and to incorporate more variables related directly to the student's personality characteristics. Further investigation is needed into the risk process, i.e. the mechanisms by which internet overuse contribute to potential mental health problems. Longitudinal research and intervention studies would be particularly helpful.

These results add to a growing body of evidence documenting the associating between mental health and internet overuse. Mental health problems among young adults bear a significant personal costs as well as costs to the community, early intervention and prevention that targets at-risk students with identified risk factors is effective in reducing the burden of depression among young people.⁽¹⁶⁾ Screening for at-risk students in the university could be considered an effective early prevention strategy according to recent meta-analysis.⁽¹⁷⁾

We hope that this preliminary study will encourage university health and student affairs professionals, particularly those involved with mental health issues, to become more aware of the types of problems that can arise from excessive use of the Internet as long as Internet use is often encouraged as a valued feature in academic environments.

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