

Citation: Zahid, M., & Rauf, M. (2022). Effects of Internet Addiction on the Psychological Health of University Students in Mardan. *Global Mass Communication Review*, VII(I), 24-36.

[https://doi.org/10.31703/gmcr.2022\(VII-I\).03](https://doi.org/10.31703/gmcr.2022(VII-I).03)

URL: [http://dx.doi.org/10.31703/gmcr.2022\(VII-I\).03](http://dx.doi.org/10.31703/gmcr.2022(VII-I).03)

DOI: 10.31703/gmcr.2022(VII-I).03

p- ISSN: 2708-2105

p- ISSN: 2709-9458

Vol. VII, No. I (2022)

Pages: 24 – 36



Effects of Internet Addiction on the Psychological Health of University Students in Mardan

Muhammad Zahid *

Muhammad Rauf[†]

Abstract: *Internet addiction can harm the psychological well-being of excessive internet users. It is important to study the correlation between the two scientifically. The study explores the link between internet addiction and psychological well-being among university students in Mardan, Khyber Pakhtunkhwa. The sample consisted of 150 university students. A random sampling technique was used to select respondents. Participants ranged in age from 18 to 30 years. The instruments used were the Internet Addiction scale and the Ryff Psychological Well-Being Test. Pearson correlation and T-test were used to test the hypothesis/correlation between internet addiction, gender, and psychological well-being. A significant negative relationship between internet addiction and psychological well-being was found. Similarly, a significant gender difference in internet addiction and a non-significant gender difference in psychological well-being. Reduced internet use improves students' psychological well-being. Less internet use helps students' academic careers and reduces interpersonal conflicts.*

Key Words: Excessive Internet Use, Internet Abuse, Psychological Health, Mardan, University

Introduction

Study Background

The internet can be seen as a double-edged sword because it has both positive and negative aspects. On the one hand, the internet has revolutionized how we communicate, access information, and conduct business. It has opened new opportunities for people to learn, connect with others, and access goods and

services worldwide. On the other hand, the internet has also brought about new challenges and risks. For example, it has given rise to cyberbullying, online harassment, and the spreading of misinformation. It has also made it easier for criminals to e such as identity theft, fraud, and online scams. Moreover, the internet has also brought about privacy concerns that personal information can be easily shared and accessed by others online. It

* Lecturer, Department of Sociology, Abdul Wali Khan University, Mardan, KP, Pakistan.

Email: (mzahid@awkum.edu.pk) (*Corresponding Author*)

[†] Elementary School Teacher, Department of Education, Government of Khyber Pakhtunkhwa, Pakistan.

has also been criticized for contributing to social isolation and internet addiction, online and face-to-face interaction with others. Internet consumption for many of the population is considered an important part of the world. (Cheung & Lee, 2009). Besides benefits, the internet has brought some undesirable things too. One of these could be internet addiction. Internet addiction is so prevalent that some statistics show that every eighth American national is an Internet addict (Kapahi, 2013). Since the invention of the internet, the internet has become a widely used tool for communication. Internet usage has grown tremendously in functions, capabilities, accessibility, and convenience. Multifunctionality of the Internet has increased users' usage and become an important part of modern life (Schneider, 2006).

Of course, the Internet has many benefits, but negative aspects, such as excessive and problematic Internet use, must also be investigated. (Douglas et al., 2006; Fringos & Fringos, 2009). Pathological Internet use, overuse of the Internet, and problematic Internet use are all terms used to describe Internet addiction (Kim, 2008; Schumacher, 2000). Internet addiction has effects on physical health too (insomnia, headaches). Internet addiction also harms mental and psychological health. Anxieties, mood swings, and depression are a few effects of internet addiction (Kim, 2008). Lastly and importantly, social health can be compromised, such as difficulties relating to family and friends, and professional life. All suffer from problematic Internet use (Bion et al., 2009; Guan, 2009). There has also been research into the link between internet addiction and low GPAs, dropouts, marital

relations, and other spheres of life in students (Young, 2004).

Internet addiction can be characterized as a situation in which a person's Internet use has become out of control, causing psychological-social, educational, and work-related challenges and difficulties. (Davis 2001). It is also characterized by behavioral associations (Sadock & Sadock, 2007). American psychologist Kimberly Young (1998) began her internet addiction research in 1998. She asserted that the symptoms and features of internet addiction are similar to those of drug addiction. She devised a scale to measure internet addiction. It had 20 items on a 5-point Likert scale, which has been used in previous studies. She believed that internet addiction can be in different forms.

Cyber sexual addiction: A type of addiction characterized by persistent and excessive use of the internet or digital devices to engage in sexual activities, such as viewing pornography, engaging in cybersex, or seeking out sexual partners online.

Cyber relationship addiction: A type of addiction characterized by the persistent and excessive use of the internet or digital devices to maintain relationships, often to the detriment of real-world relationships. This can involve excessive use of social media, dating apps, or online chat rooms.

Pure compulsions: A term used to describe compulsive behaviors that are not related to substance abuse or dependence. This can include behaviors such as compulsive gambling, shopping, or internet use.

Information overload: A state of being overwhelmed with too much information, which can lead to stress, anxiety, and difficulty

in making decisions. This can be caused by the rapid pace of technological advancements and the increasing availability of information online.

Computer addiction: A type of addiction characterized by persistent and excessive use of computers, digital devices, or the internet, often to the detriment of one's personal or professional life. This can manifest as compulsive use of social media, gaming, or other online activities.

Causes of Internet Addiction

Several studies have been conducted to ascertain Internet addiction's causes in people/students. Internet addiction is common among university students (Nalwa & Anand, 2003; Niemz et al., 2005). Researchers cited different reasons accountable for internet addiction. Students with more free time and access to free and nonstop internet could be addicts. Students with fewer checks and balances by parents could also be internet addicts. Similarly, students with less social interaction in family and society could be inclined towards internet addiction. , lastly, students searching for relief through online activities may end up as internet addict. (Young, 2004).

Other researchers reported that internet addicts seek to meet personal needs such as belonging, transforming themselves into reality, watching explicit content, and conversing with friends (Cheung & Lee, 2009;). Searching for entertainment and entertainment on the Internet has also been linked to increased and problematic Internet usage (Haridakis & Hansen, 2009). According to other studies, internet addicts believe they

use the internet for comfort, excitement, and a pleasant place for social exchange (Suler, 2000). As a result, internet addicts are more likely than regular internet users to derive greater satisfaction and happiness from internet interaction. (Johnson & Kaye, 2002)

Psychological Well-being

Psychological well-being is an appraisal of one's life in terms of life satisfaction and positive effect (Diener & Chen, 2011), which encompasses an individual's overall feeling of positive progress and development (Waterman, 1993). According to studies, well-being includes two components: emotional and cognitive (Busseri & Sadava, 2011; Larsen & Prizmic, 2008). The former (emotional) relates to the incidence of happy feelings with few bad emotions, whilst the latter (cognitive) refers to people's overall cognitive judgement of their life (Lohmann, Hoffman, Eid, & Lucas, 2012). Other research related well-being to having a sense of purpose and direction in life, creating, sustaining, building long-term connections, and maximizing one's potential. Researchers also claimed that these aspects of well-being are interrelated and crucial components for doing greater and more human tasks (Ryff & Singer, 1998).

Individuals, groups, or nations can flourish and thrive when they are in a state of well-being. It is the result of feeling well and doing well. Excessive Internet usage makes people more sensitive to psychological issues (Caplan, 2010). Students who are addicted to the internet experience somatization, obsessive-compulsive disorder, interpersonal sensitivity, melancholy, anxiety, rage, fear, anxiety, paranoid thoughts, and mental

diseases. Anxiety and stress have been linked to internet addiction. (Akin, [2012](#)).

The majority of young Internet users who spend the majority of their free time on the Internet have psychological and physical health problems.. Repetitive stress injury is one of these concerns. Anxiety, psychiatric disorders, and functional impairment have all been linked to problematic Internet use (Suissa, [2014](#)). Furthermore, several studies have linked internet addiction to anxiety, loneliness, depression, and compulsive behavioural self-esteem. Other studies have linked internet addiction to symptoms of ADHD and major depression. (Mustafaei & Khalili, 2012).

Anxiety and stress can be exacerbated by internet addiction (Yu, 2001). Anxious and stressed people frequently struggle to communicate and interact with others healthily, positively, and meaningfully these human qualities are regarded to be important in internet addiction. Furthermore, a correlation has been identified between increasing internet usage and psychological discomfort, and loneliness. (Liang et al., [2016](#)).

Operational Definition of Terms

Internet Addiction

Internet addiction is defined as a person's inability to control their internet usage, which leads to psychological, social, academic, and occupational issues. (Young, [1998](#)).

Psychological Well-being

Psychological well-being is defined as "individually valued relationship in life, self-righteousness, excellent psychological

functioning, and progress on one's true highest potential." (Ryff, [1989](#)).

Rationale of Study

This research aims to investigate the relationship between Internet addiction and psychological well-being among university students in Mardan. The widespread use of the Internet has resulted in many individuals spending excessive amounts of time online without awareness of the potential negative consequences. The negative effects of Internet addiction on mental health and well-being are increasingly being recognized as a serious concern. Therefore, raising awareness among youth and society about healthy internet use practices is essential to prevent detrimental effects on their lives.

While different aspects of Internet addiction have been explored, there has been little study on the particular association between Internet addiction and psychological well-being in Mardan and Khyber Pakhtunkhwa. The purpose of this research is to fill a gap in the literature by investigating the possible influence of excessive Internet usage on the psychological well-being of university students in Mardan.

This study aims to give insight into the possible impacts of Internet addiction on mental health by researching the connection between Internet addiction and psychological well-being. The study's results might help guide the development of therapies to encourage healthy online behaviour and prevent or cure Internet addiction among university students. Finally, the goal of this study is to add to the body of information about Internet addiction and its influence on

psychological well-being, as well as to provide suggestions for improving the mental health and well-being of university students in Mardan.

Objectives of Study

1. To explore the link between internet addiction and psychological well-being among university students of Mardan.
2. To examine gender differences in internet addiction and psychological well-being among Mardan University students

Hypotheses

- H1:** There is a significant negative correlation between internet addiction and psychological well-being.
- H2:** There is a significant gender differences in internet addiction among university students of Mardan
- H3:** There is a significant gender difference in the psychological well-being among university students of Mardan

Literature Review

Internet Addiction and Psychological Well-being

Several research have been conducted to study the relationship between internet addiction and psychological well-being. Rehman, Shafi, and Rizvi (2016) performed one of these research, which evaluated the impacts of internet addiction and analyzed study factors. They interviewed 100 people. According to the research, there is a statistically significant detrimental association between internet addiction and psychological well-being.

Mehmet Kardak did another research on the association between internet addiction and psychological well-being (2013). 479 Turkish university students took part in this research. The researchers found that loneliness/depression, social comfort, and distraction are all poor indicators of psychological well-being. It was also observed that kids who were more hooked to the internet had worse mental health.

Huang et al. (2010) look at the relationship between Internet usage and psychological well-being variables as sadness, loneliness, self-esteem, and life satisfaction. Forty research give 43 independent correlation data from a total sample of 21,258 persons. The fixed effects model had an average correlation of 0.0504, while the random effects model had a correlation of 1/4 0.0385, demonstrating that internet usage had a slightly negative influence on psychological well-being. The effect of all moderators, including the type of Internet use, indicators of well-being, quality of measuring Internet use, and age and gender of participants, was negligible, according to the Random Effects Model, because researchers failed to explain the difference in the relationship between internet use and psychological well-being.

Kawa and Shafi (2015) explored internet addiction and psychological discomfort in university students in another research. This survey comprised 100 university students, 61 of whom were males and 39 of whom were women, selected at random from Kashmir University's main campus. Male university students were shown to be more likely than female students to suffer from internet addiction and psychological anguish. There was a substantial positive association between

internet addiction and psychological suffering among university students. According to the results, rural university students showed greater levels of internet addiction and psychological suffering than urban university students.

Al-Makran and Zaidi (2016) did this research to evaluate the association between internet addiction and psychological well-being. In addition, the link between weekly average internet usage and addiction is being studied. Princess Nora University picked 153 students aged 19 to 26. They were selected at random from a variety of medical colleges. Its results suggest a link between psychological well-being and happiness.

Mahadevaswamy and Lansey conducted another investigation (2018). The purpose of this research is to investigate the impact of internet addiction on the psychological well-being of young people in and around Mysuru. 720 students from grades 10, 11, and 12 participated in the study, with an equal number of male and female pupils. According to the data, as internet addiction levels climbed, total psychological health ratings declined linearly and considerably. As degrees of internet addiction increased, so did autonomy, environmental skills, and happiness in the particular purpose component of life.

Research Methodology

Universe and Sample

A total of 150 university students were recruited from various universities in Mardan. The sample included undergraduate and graduate-level students. The age range of participants is between 19-26 years. The

samples were accessed through simple random sampling. Survey research based on online questionnaires was used. Informed consent was taken before the data collection.

Instruments

Standard Test of Internet Addiction

Kimberly Young developed the standard test of internet addiction. It is a widely used test for internet addiction. It has a total of 20 items. This is a 5-Likert scale with responses ranging from "always" to "not often" (5 = always, 4 = most, 3 = often, 2 = sometimes, 1 = not often). The score ranges from 0 to 100. There are three levels of users, including non-addict (score: 20-49), possible addict (score 50-79), and addicted users (score: 80-100). Higher scores indicate greater extents of addiction. The scale's alpha is .87, indicating that it is the most reliable scale to be used in the study.

Psychological Well-being Scale

This scale was developed by Ref. in 1989. The scale has six mental measurements: self-acceptance, positive relationships with others, environmental skills, and personal development questions, purpose in life questions, and self-acceptance questions. The alpha reliability of the scale is found to be .82.

Procedure

The study was conducted on 150 (75 male and 75 female) students selected from different universities in Mardan. Simple sampling techniques were used to collect data.

Step 1

Prior to data collection, a pilot study was

conducted to assess the tools' reliability. No ambiguity was found about the forms provided to them. For the pilot study, samples of 50 participants (25 men and 25 women) were taken. This study was carried out to test the reliability of the tools used in the research study. The SPSS-20 version analyzed the pilot data.

Step 2

After the pilot study, a full pledged study was performed. A sample of 150 students was contacted for final data. Respondents were also informed about the purpose of the current research. Before completing questionnaires, partners are assured that their data will be confidential. The questionnaire was given in google survey format; only 25-30 minutes were required to complete it. The collected data was

then further analyzed by the SPSS-20 version. The data were analyzed through the application of correlation tests and t-tests. The results of the study were interpreted and discussed, considering a review of the literature.

Statistical Tests

Pearson correlation and T-test were used to test the hypothesis of the current study.

Results and Discussion

The present research looked at the link between internet addiction and psychological well-being among university students in Mardan, Khyber Pakhtunkhwa. SPSS was used to analyze the data. The following are the findings from the data analysis.

Table 1. Characteristics of the sample

Age	Frequency Percentage	
17-20	62	41.34
21-2	73	48.66
25 and above.	15	10
Education		
BS	84	56
but	27	18
M.Sc.	31	20.67
MPhil/ Others	8	5.33
Sex	Frequency Percentage	
Male	75	50
substance	75	50

Internal Consistency of the Instruments

Cronbach's Alpha Coefficients are shown in table 1.

Table 1. Alpha numbers for all variables (n = 150)

S. No	Scale	Number of Items	one
1	IA	20	.87

S. No	Scale	Number of Items	one
2	PW	18	.82

Note. IA = Internet addiction test, PW = psychological well-being

The reliability of all instruments was checked. The table shows that the scales were reliable and internally consistent. Thus, the instruments are reliable and suitable for further statistical analysis.

Relationship between Internet Addiction and Psychological Well-Being

The Pearson product-moment correlation was calculated. The results are given in the table.

Table 2. Relationship between internet addiction and psychological well-being among university students of Mardan.

Variable	N	r =
Internet Addiction	150	
Psychological Well-being	150	-.218* (P=.030)

* Significant at the 0.05 level of significance.

Table 2 shows the correlation between internet addiction and psychological well-being among university students. The results showed a significant negative correlation between internet addiction and psychological well-being because the correlation ratio ($r = -.218^*$, $p = .030$) is significant at the 0.05 level. This means that students with internet addiction will be more or less into psychological health. Therefore, H1 is accepted.

Gender Differences in Internet Addiction and Psychological Well-being

Independent sample t-tests test gender differences in internet addiction and psychological well-being. The results are presented in Table 3.

Table 3

Variable	N	Price
Internet Addiction	150	
	Male 75	3.626*(p < .001)
	Female 75	
Psychological Wellbeing	150	
	Male 75	0.841 ^{NS} (p = .43)
	Female 75	

Table 3 shows a significant gender gap in internet addiction but no significant gender difference in psychological well-being. Males score higher on the internet addiction scale than females. Therefore, H2 is accepted, while H3 is rejected.

Discussion

The current study looked at the relationship between internet addiction and psychological well-being in Mardan, Khyber Pakhtunkhwa. The study also looked to see if there were any gender differences in these variables. The data were analyzed using statistical software for social sciences version 20 (SPSS-20) to accomplish these goals. Statistics show that all tools are dependable and internally compatible (Table 1).

Pearson Correlation was used to examine the relationship between internet addiction and psychological well-being (Table 2). The t-test was used to investigate gender differences in internet addiction and psychological well-being (Table 3).

The Pearson Correlation test (Table 2) was used to investigate the relationship between internet addiction and the Pearson Correlation test. Hypothesis 1 is supported by the findings, which show a significant negative relationship between Internet addiction and psychological well-being ("There is a negative relationship between Internet addiction and psychopathy"). The first assumption is correct. The findings show that this study supports the preliminary research discussed in the literature review. The study's findings agree with previous research by Mahadevaswamy and Lansari (2018). This study aims to look into the impact of internet addiction on the psychological well-being of young people in

and around Mysuru. The study included 720 students in grades 10, 11, and 12, with an equal number of male and female students. According to the findings, as internet addiction levels increased, overall psychological health scores decreased linearly and significantly. Autonomy, environmental skills, and well-being in the specific purpose component of life all increased as levels of internet addiction increased.

In (Table 3), the independent sample t-test revealed a significant gender difference in internet addiction but no gender differences in psychological well-being. The findings back up Hypothesis 2. ("Gender differences in internet addiction are significant"). Hypothesis 3 is, however, rejected ("There are significant gender differences in psychological well-being"). Previous research findings are comparable to those of the current study. Another study on the relationship between internet addiction and psychological well-being was conducted by Mehmet Cardak (2013). The study included 479 university students. Loneliness/depression, social comfort, and distraction were discovered to be negative predictors of psychological well-being. It was also discovered that students more addicted to the internet had poorer psychological health. Rahman, Shafi, and Rizvi (2016) conducted a study that looked into the effects of internet addiction and experimented with different variables. The research found a statistically significant negative relationship between internet addiction and psychological well-being.

Conclusion and Suggestions

The current study's findings indicate a significant negative relationship between internet addiction and psychological well-being. Gender differences were also discovered, with a significant gender gap in internet addiction and no significant gender difference in psychological well-being in students. The results show that hypotheses 1 and 2 of the current study are accepted, while hypotheses 3 and 4 are rejected. The findings suggest the need for interventions that promote healthy online behaviors and support students struggling with Internet addiction or related mental health issues. The study also underscores the importance of raising awareness about the potential risks of excessive Internet use and encouraging responsible use of technology among university students and the wider community.

Some suggestions to prevent internet addiction include.

1. **Raise awareness:** Universities should conduct awareness campaigns and seminars to educate students and teachers about the risks of excessive Internet use and its negative impact on mental health. This can include sharing information on identifying signs of addiction, taking breaks from technology, and strategies for healthy online behavior.
2. **Establish policies:** Universities should establish policies and guidelines that promote healthy online behavior and prevent Internet addiction. These policies could include guidelines for using electronic devices in the classroom, restrictions on using

technology during breaks, and rules around Internet usage in university dormitories.

3. **Offer support:** Universities should provide support services for students and teachers struggling with Internet addiction or related mental health issues. This can include counseling services, support groups, and referrals to mental health professionals.
4. **Encourage physical activity:** Encouraging physical and outdoor activities can help reduce students' time on the Internet. Universities can promote sports, exercise programs, and other physical activities to keep students engaged and active.
5. **Monitor Internet usage:** Universities can monitor students' Internet usage to identify early signs of addiction and intervene before the problem becomes severe. This can involve tracking students' online time, the websites they visit, and their online behavior.
6. **Provide alternatives:** Universities can provide alternatives to Internet usage by offering activities that promote social interaction, such as group discussions, team-building exercises, and cultural events.
7. **Foster a culture of balance:** Finally, universities can foster a balanced culture by encouraging students to balance online and offline activities. This can involve setting goals for technology use, encouraging students to take breaks from the Internet, and promoting the importance of self-care and mental health.

References

- Akin, A. (2012). The relationships between Internet addiction, subjective vitality, and subjective happiness. *CyberPsychology, Behavior, and Social Networking*, 15, 404–410.
<https://doi.org/10.1089/cyber.2011.0609>
- Caplan, S. E. (2010). Theory and measurement of generalized problematic Internet use: A two-step approach. *Computers in Human Behavior*, 26, 1089–1097.
<https://doi.org/10.1016/j.chb.2010.03.012>
- Cardak, M. (2013). Psychological well-being and Internet addiction among university students. *Turkish Online Journal of Educational Technology-TOJET*, 12(3), 134–141.
- Cheung, C. M. K., & Lee, M. K. O. (2009). Understanding the sustainability of a virtual community: Model development and empirical test. *Journal of Information Science*, 35(3), 279–298.
<https://doi.org/10.1177/0165551508099088>
- Davis, R. A. (2001). A cognitive-behavioral model of pathological Internet use. *Computers in Human Behavior*, 17(2), 187–195.
[https://doi.org/10.1016/S0747-5632\(00\)00041-8](https://doi.org/10.1016/S0747-5632(00)00041-8)
- Diener, E. and Chan, M. Y. (2011). Happy People Live Longer: Subjective Well-Being Contributes to Health and Longevity. *Applied psychology: Health and Wellbeing*, 3(1), 1–43.
<https://doi.org/10.1111/j.1758-0854.2010.01045.x>
- Douglas, A. C., Mills, J. E., Niang, M., Stepchenkova, S., Byun, S., Ruffini, C., & Blanton, M. (2008). Internet addiction: Meta-synthesis of qualitative research for the decade 1996–2006. *Computers in human behavior*, 24(6), 3027–3044.
<https://doi.org/10.1016/j.chb.2008.05.009>
- Frangos, & Frangos. (2009). *Internet Addiction among Greek University Students: Demographic Associations with the Phenomenon, using the Greek version of Young's Internet Addiction Test*.
- Guan, S. S. A., & Subrahmanyam, K. (2009). Youth Internet use: risks and opportunities. *Current opinion in Psychiatry*, 22(4), 351–356.
<https://doi.org/10.1097/YCO.0b013e32832bd7e0>
- Haridakis, P., & Hanson, G. (2009). Social interaction and co-viewing with YouTube: Blending mass communication reception and social connection. *Journal of Broadcasting & Electronic Media*, 53(2), 317–335.
<https://doi.org/10.1080/08838150902908270>
- Huang, X. Q., Li, M. C., & Tao, R. (2010). Treatment of internet addiction. *Current psychiatry reports*, 12(5), 462–470.
- Johnson, C. T., & Kaye, B. K. (2002). Webbelievability: A path model examining how convenience and reliance predict online credibility. *Journalism & Mass Communication Quarterly*, 79(3), 619–642.
<https://doi.org/10.1177/107769900207900306>
- Kapahi, A., Ling, C. S., Ramadass, S., & Abdullah, N. (2013). Internet addiction in Malaysia causes and effects. *I Business*, 5(02), 72–82.
<https://doi.org/10.4236/ib.2013.52009>
- Kawa, M. H., & Shafi, H. (2015). Evaluation of internet addiction, impulsivity and

- psychological distress among university students. *Int J Clin Ther Diagn*, 3(1), 70-76. <https://doi.org/10.19070/2332-2926-1500014>
- Kim, J. U. (2008). The effect of an R/T group counseling program on the Internet addiction level and self-esteem of Internet addiction university students. *International Journal of reality therapy*, 27(2), 7-15.
- Larsen, R. J., & Prizmic, Z. (2008). *Regulation of emotional well-being: Overcoming the hedonic treadmill*. In: Eid, M.; Larsen, RJ., editors. 258-289. New York, NY US: Guilford Press.
- Liang, L., Zhou, D., Yuan, C., Shao, A., & Bian, Y. (2016). Gender differences in the relationship between Internet addiction and depression: A cross-lagged study in Chinese adolescents. <https://doi.org/10.1016/j.chb.2016.04.043>.
- Mostafaei, A., & Khalili, M. (2012). The relationship between Internet Addiction and mental health in male and female university students. *Annals of Biological Research* 3(9), 4362-4366. (<http://scholarsresearchlibrary.com/archives.html>)
- Nalwa, K., & Anand, A. (2003). Internet addiction in students: a cause of concern. *Cyber Psychology and Behavior*, 6, 653-656. <https://doi.org/10.1089/109493103322725441>
- Niemz, K., Griffiths, M., & Banyard, P. (2005). Prevalence of pathological Internet use among university students and correlations with self-esteem, the General Health Questionnaire (GHQ), and disinhibition. *Cyber psychology & behavior*, 8(6), 562-570. <https://doi.org/10.1089/cpb.2005.8.562>
- Rehman, A., Shafi, H., & Rizvi, T. (2016). Internet addiction and psychological well-being among youth of Kashmir. *Int J Indian Psychol*, 3(3), 6-11. <https://doi.org/10.25215/0303.040>
- Ryff, C. D., & Singer, B. H. (1998). The contours of positive human health. *Psychological Inquiry*, 9, 1-28. https://doi.org/10.1207/s15327965pli0901_1
- Sadock, B. J., & Sadock, V. A. (2007). *Impulse Control Disorders*. In: Kaplan & Sadock's synopsis of psychiatry: Behavioral Sciences/Clinical Psychiatry 10th ed. Philadelphia: Lippincott williams & Wilkins, 850-82.
- Schneider, L. A., King, D. L., & Delfabbro, P. H. (2018). Maladaptive coping styles in adolescents with Internet gaming disorder symptoms. *International Journal of Mental Health and Addiction*, 16(4), 905-916. <https://doi.org/10.1007/s11469-017-9756-9>
- Suissa, A. J. (2014). Cyberaddictions: Toward a psychosocial perspective. *Addictive behaviors*, 39(12), 1914-1918. <https://doi.org/10.1016/j.addbeh.2014.09.020>
- Suler, J. R. (2000). Psychotherapy in cyberspace: A 5-dimensional model of online and computer-mediated psychotherapy. *Cyber Psychology and Behavior*, 3(2), 151-159. <https://doi.org/10.1089/109493100315996>
- Waterman, A. S. (1993). Two Conceptions of Happiness: Contrasts of Personal Expressiveness (Eudaimonia) and Hedonic Enjoyment. *Journal of Personality*

- and Social Psychology*, 64, 678-691.
<https://doi.org/10.1037/0022-3514.64.4.678>
- Young, K. S., & Rogers, R. C. (1998). The relationship between depression and internet addiction. *Cyber psychology Behaviour*, 1, 25–28.
<https://doi.org/10.1089/cpb.1998.1.25>
- Young, K. S. (2004). 'Internet Addiction: A New Clinical Phenomenon and Its Consequences', *American Behavioral Scientist*, 48, 402-415.
<https://doi.org/10.1177/0002764204270278>
- Zahid, M., Zaid, R., & Zakria, M. (2019). Prevalence of Internet Addiction among Social Sciences Students at Abdul Wali Khan University Mardan. *Sir Syed Journal of Education & Social Research (SJESR)*, 02(01), 55–66.