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<b>Article:</b>	<b>Internet Addiction, Emotional intelligence and Psychological wellbeing of College Students at Hyderabad</b>
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## ABSTRACT

To assess the impact of internet dependence, emotional acumen and psychological health of college students at Hyderabad city. Study design is cross sectional analytical. 300 college students, of both genders, age 16-19 years. For data collection consent was sought from the heads of the colleges. The instruments used were, Bio data form, IAT by Kimberly Young 1998 (Urdu version), SRMEI by Goleman 1995 (Urdu version) and Ryff 1995 PW scale (Urdu version). On SPSS, Mean differences, Regression and Pearson correlation suggested an important impact of internet obsession on aptitude and mental wellbeing of the participants, proving all hypotheses. Note-worthy negative bond between the internet obsession, emotional intellect and cognitive health was witnessed. Similarly, there is negative association seen amongst cyber addiction and emotional intelligence. The conclusion will help to direct the youth from their early age on constructive control of their expressions and proper usage of technology for healthy psycho-social life style.

**Keywords:** Internet Addiction Disorder (IAD), Emotional intelligence (EI), Psychological wellbeing (PW)

**Introduction:**

As the world transmitted into technological globalization, in reach of every individual from young child to old, irrespective productive utilities it has also brought some shocking waft on the overall life cycle. All recent researches on internet usage have shown remarkable effects on the social and economical state of individuals without any discrimination of their nature of work (Khan, et al., 2022). An unwarranted use of the cyber world that disrupts survival of the humans was named as Internet addiction disorder (IAD), (Block, 2008). Therefore, initially used as a habit and later it becomes a compulsion, owing to the poor persona, further resulting into emotional and psychological troubles amongst adults (Kuem& Ray 2021). In 2020 Dong, et al during the Corona epidemic observed, the extreme usage of internet amongst the children and adolescents of China adversely affected the psychological welfare ,feelings of loneliness and psychiatric ailments among the populace (Cauberghe, et al., 2020).

A paper presented by Ravulakollu, et al., 2022 on individuals terribly in habit of using cell phones for every task showed inadequate sleep patterns, neurological disturbance and many other psychiatric illnesses in them. Where the Internet approach can be helpful, nevertheless one needs to be cautious about the amount of time they spend on it regularly, as it results in delay of chores among dependents (Kim, et al., 2017).

According to researches, parenting styles weight over the character makes up of adolescents and their association with cyberspace obsessions at Iran suggested strong impact on perception of people (Zarei et al., 2022; Maghsoudi et al., 2015). Some Psychologists have acknowledged the cyber obsession as a mental problem. Researchers have emphasized on the role of personal characteristics which enable their wellbeing and vulnerability towards obsession (Gunlu & Bas,2022).Many instances happened through-out the sphere due to the disproportionate use of this widespread technology, where people involved in implicated hostile actions through deadly games like blue Wales, self-inflicted challenges etc., on the cyberspace whether have taken life or gravely wounded the young community (such as Khasawneh et al., 2020; Okwaraji et al., 2015).

Reportedly, there are 44.61 million people in Pakistan use world wide web (World Internet Stats), whereas International Telecommunication Union (ITU) revealed 31.45 million. As of today, we are in the ten largest inhabitants of internet users in the world with approximately 76.38 million users (Wikipedia, 2020).

A significant correlation was revealed in uncontrolled utilization of technological approach of the Bangladesh young lads on their psychological aspects, secluded feelings and inadequate self-worth (Mamun et al., 2020). The DSM-IV (1995) supported the neurobiological studies commonly acknowledged behavioral gambling disorder with the obsessive use of internet (Lobo et al., 2015).

The latest technological burst has all around affected private and communal life (Ko, 2008; Brodie 2007; La Rose, 2001).Factors like manliness, low collective support and disturbed personality qualities also predict internet dependence amongst the university youngsters (Henderson et al., 2006).Cyber obsession akin to the substance dependents exhibits behavioral, emotional and psychological tribulations (Nemati&Matlabi, 2017).

Griffiths (1995) described two types of addicts; first those who use cyber tools for revenue, spend free time, and have fun. While the other group using the machine as a flight

from difficulties or switch of consideration from the bonds and hardships as a protective shield (escape goat behavior). Davis (2001) stressed on people affliction from psychiatric ailments or drug abuse retrieve to cyber world as a mode to flee from real World. More over the individuals with scarce resilience easily gets attracted to unusual competitions and societal links on internet. Chaplan (2010) incorporated people working on the mere whims same who preferred remaining on virtual connection then meeting actually which in turn can lift mood and evading mind-set of solitude (Haagsma et al., 2013). Pathologic technical usage and the cognitive behavioral model for relationship between social anxieties supported the model through an analytical study (Prizant- Passal, et al., 2016).

The irresistible use of cyber and lowliness remained in close association with the poor control over nerves (Tokunaga Rains, 2016). A study with the adolescents of mild oddity and ordinary mental caliber by Garcia et, al (2020), showed the same cyber obsession, aptitude and psychological problems. Epileptic seizers amongst the young lads were reported due to continual use of playing online games (Chuang, 2006). Kim, et al., 2017 from Korea explained the alarming situation of link between perturb sleep and consequently desperate behavior amid adults due to the dependence on internet. At Hong Kong a school based study showed strong association of internet habit and melancholy while no link was observed with self-respect (Cheung et al., 2018).

Since last decade and so, addiction to telecommunications technology in Pakistan resulted in many crises. Patients' histories by the psychologists reported that treatment usually got extinction due to undue duress caused by telecommunications, web play or conversing through remote and imperceptible unknown individuals in the cyberspace. Niaz (2008), also found the same connection of wire with the psychiatric infirmity among Pakistani populace. An investigation on the relationship between Facebook infatuation, melancholy, nervousness, delusions and scholastic performance, concluded the negative blow on student mental health over time and following anxiety decline in the performance of the scholar (Zaffar et al. 2015).The intention of this research is to reveal the nature of liaison connecting web compulsion, psychological wellbeing and emotional aptitude amid college students of Hyderabad.

### **Hypotheses**

In the perspective of objectives described following hypotheses were outlined:

1. There would be negative association of Cyber dependence, emotional aptitude and mental comfort.
2. There would be Co-morbidity of the cyberspace dependence with emotional capacity.
3. There would be a note-worthy link in emotional intelligence and psychological wellbeing of students.
4. There would be differences amongst the gender in internet obsession, emotional intelligence and psychological wellbeing.

### **Method**

#### **Sample**

300 adolescents equally from different colleges of Hyderabad city participated in the present study. Over all there are twenty-one Government colleges in Hyderabad for both genders, but data was collected from indiscriminately picked three boys' and girls' colleges.

The age of the participants from 16 to 19 years with mean age = 18.01, however, from diverse living conditions of Hyderabad. The male proportion remained 54% whereas 46% females due to accessibility.

### **Instruments**

Three questionnaires were administered, along a Demographic Performa in the present study.

Kimberly Young (1998), Internet addiction Test (IAT), based on DSM- IV criterion of internet addiction after permission from the original author of the scale the researcher used back translated version (Urdu).The twenty items measured on three levels severity on the five-point Likert scale; where 1-5 assigned to rarely to always like options. The reliability of IAT (Young, 1998) Cronbach's Alpha  $r = 0.894$  evinced, high-quality reliability.

Translated 54 items version of Carol Ryff Psychological wellbeing (1995) by Rehana Manzoor from Pakistan was administered. On the Likert format from strongly disagree to strongly agree. Further the negatively scored items were inverted in the final scoring. Translated version of the tool reliability  $r = .853$ , representative of consistent status.

For self-evaluation of emotional intelligence, Urdu version by Anila Kamal (2010) was administered. This Self-Report Measure of Emotional Intelligence known as SRMEI(Goleman, 2001) miscellaneous sculpt of one's aptitude. The instrument is a quality scale to determine healthy population.

Personal identification form starting with the initial information of the participant along their geographic area and the time spent on social feature. Nature of parental work and academic record was also included.

### **Procedure**

After permission from authorities the data was collected within class setting. At first the students were communicated regarding the aspects of the search analysis and guaranteed secrecy of their identity. Questionnaires were briefed after the approval was taken. The standard time, while completing the sum of 124 items, they took 70 to 80 minutes.

### **Results**

Results analyzed through SPSS, for eloquent figures, parallel coefficient and regression scrutiny was administered. To execute the assumptions of linear regression analysis linearity and ordinariness of the facts was ascertained. For gender differences analysis-t-tests was administered. The likelihood for hypotheses evaluation kept as .05.

**Table 1**

*Pearson Correlation coefficient of internet addiction, emotional intelligence and wellbeing of participants*

<b>Variables</b>	<b>IA</b>	<b>PW</b>	<b>EI</b>
<b>IA</b>	---	- 0.257*	- 0.246*

Note:  $df = 298, p < 0.05$

The table showed inverse connection of internet use with emotional intelligence ( $r = -.246^*$ ,  $p < 0.05$ ) meaning more use of internet decreases emotional intelligence amongst participants. Findings suggested considerable negative liaison between use of internet and mental well-being ( $r = -0.25$ ).

**Table 2**

*Regression Analysis of internet addiction and emotional intelligence*

	Predictor	B	S.E.	<i>B</i>	<i>R</i> <sup>2</sup>	<i>F</i> ( <i>df</i> )
EI	(Constant)	213.1	4.580			
	IA	-.437	.104	-.246	.122	17.55**(1,297)

Note:  $df = 298, p < .001$

The table shows internet addiction as a significant predictor of emotional intelligence. The internet addiction explaining the 12% variance ( $R^2 = .122$ ) in the emotional intelligence.

**Table 3**

*Pearson Correlation between emotional intelligence and psychological wellbeing*

Variables	EI	PW
EI	–	0.36**

Note:  $df = 298, p < 0.05$ , (EI = emotional intelligence, PW = Psychological wellbeing)

The correlation coefficient explains noteworthy connection in variables ( $r = .36^{**}$ ,

$p < 0.01$ ), revealing the direct relation with each other.

**Table 4**

*t-test analysis of variables of the scores of male and female participants*

Scale	Gender	N	<i>M</i>	<i>SD</i>	<i>F</i>	<i>P</i>	<i>C.I</i> (95%)	
							<i>L.L</i>	<i>U.L</i>
<b>IA</b>	Male	150	196.3	22.9	.072	.789	-1.1	9.2
	Female	150	192.3	21.4			-1.1	9.2
<b>EI</b>	Male	150	205.3	36.2	.965	.327	-7.7	9.0
	Female	150	204.7	36.9			-7.7	9.0
<b>PW</b>	Male	150	41.5	12.8	.353	.553	-3.3	2.5
	Female	150	41.9	12.6			-3.3	2.5

Table reflecting no considerable mean differences, among the genders on internet addiction, emotional intelligence and psychological wellbeing.

## DISCUSSION

The work abridged to locate the prophetic impact of hi tech need on the adolescent's emotional acumen and psychological comfort. In current contemporary era, cyberspace is a means for facilitation in academic knowledge of students living at distance or near-by. The advance world helped in reducing time from going to documentation and probing mass of reading materials, relatively numerous references are available on internet just a mere touch

away. Yet, such hi-tech approach has negatively affected the sensitive age group at large, burly forecaster of causing mental annoyance and insufficient expressions in the youth (Sharma & Sharma, 2018).

The verdicts on cyber craving drastically predicted on emotional intelligence and psychological wellbeing, as supported by prior studies (Hamissi, et al., 2013; Peng, et al., 2019). The attachment developed narcissistic qualities in teenagers, as well as belligerence and weak impulse control over expressions (Faret al., 2014).

Development in the field of Information machinery has brought unimaginable perils to the intellectual vigor of mankind. Humans though not a section of apparatus; they have potential acumen and emotions, which spark and enlighten their deeds towards any essence. All populace perceives and define use of substance diversely and according to their-own predispositions, temperaments, or by bio-socio-psychological needs.

Predominance of hi-technology use among young students has emerged as a stern calamity identical to substance abuse, personal relationships, societal deeds and scholarly status. Intelligence with controlled emotions projects considerate, logic and proper use of expressions. The unnecessary commitment with World Wide Web leads to commotion in social binding with others, confidence on oneself, impulse management, independence and individuals' self-growth.

Brunt of cyber infatuation on psychological welfare remained apparent in earlier studies (Samantray, et al.). Emotionally stable pattern of thinking intelligence is a vital proficiency for maintaining stable associations, to live an unprejudiced life and achievements. Findings of studies reported that teenager squander eminence time via cell phones and social networks than preferring on ground congregate (Mascia, et al., 2020; Yam et al., 2019). However, the latest technologies have incredibly altered simplicity in one's life and also given a trail to abundant stability and internal mental anguish to individuals of different age groups (Lin et al., 2019). Youngsters' use cell phones connected on social sides such as face book and like many other shared apps for appreciation and confidence building (Ponnusamy et al., 2020).

The homogeneous hi-tech concern ended in an adolescent's stiffness in mind-set, deceit and disturbs social links with others (Lin et al., 2019). Over all, creating distance in close relations through virtual dealings rather physical communication between friends and family. It not only prejudiced the yield of communication skills, buoyancy and trusts also the overall academic performance of the adolescents (Heinrichs et al., 2011). For the students of higher studies use of World Wide Web gives quick access to information and connectivity with other institutions which facilitates their completion of tasks (Chhachhar et al., 2013; Maddi et al., 2013).

### **Limitations and Suggestions**

Present research bears some probable limitations which imply consideration while interpreting results. The age and geographic limitation restricts the generalization of the study. For future compliance the research should be conducted at the district level and extended time for data collection.

The final outcome of the study suggests that home being first training modality at early age along the institutional staff guidance can make remarkable impact on the grooming of young populace. For personality development, programs like, seminars and workshops can be set to raise awareness on psychological shelter to the youngsters of our nation. Course of action

to care givers and institutional guardians can be provided for better modification in the civilization and healthy mind utilization of the hi-tech world with-out getting addicted to the gadgets wisely.

### **Implications**

Findings of the study have an imperative implication for the guardians and academic faculty. The young students need to be informed and guide regarding emotional control from their early age as well as about the appropriate practice of technology and maintaining healthy psycho-social relationships as a whole.

### **Conclusion**

The study conclusion highlighted the emotional intelligence of the adolescents' decreases due to the excessive use of technology in any form as manifests it-self through inadequate outbursts, tantrums and impatience. The factor of social desirability in such susceptible age group, to attain social recognition among peers put them in the battle of transformation, internet providing an effortless and instant gratification of emotional expressions (Krishnamurthy & Chetlapalli, 2015).

Adolescents spent most of their time on virtual sites than giving time to their near ones and behaving in emotionally distant from their family. Such habits reduce the physical mobility of the youngsters and poor concentration towards the academics is observed (Yao & Zhong 2014). The adolescence time also called "storm and stress" age due to sensitive nature remains curious and exploring sites involving their gratification of unfulfilled desires while witnessing the unethical and immoral information prohibited for them (Downing et al., 2014). Buneviciene and Buneviciene in 2020 studied professionals who were allied to the health care system, the bang of internet on their psychological and emotional acumen.

The cyber world has an important role in general populace, other than its utilities and comforts a click away from the world; the users unjustified repercussions over satisfaction and dissatisfaction in life (Brkljacic et al., 2019). In today's era the internet has both political and religious utilities for all. Many youngsters from under privileged areas bully their own countrymen evincing the inappropriate psychological health in all those youngsters (Amalu, 2018). Parenting plays an important role in building up a strong personality; however, the parents of today era spend more time on virtual gadgets then giving quality time to their young ones (Dogan et al., 2015). According to a study by Balci et al., in 2020, people with proper guidance and control over impulses can enhance their psychological health by holding strong social knack.

There is a strong need for the awareness amid the young lots to know how to control their impulses while using Cyber-space. Technology should be used in appropriate way than as a mechanism of escape from the real world (Samantry, 2017). In recent era, the growing need of technological assistance especially the effortless access and availability to virtual associations and entertainment since early childhood till adult age resulted in the downfall of healthy personality characteristics (Cimino & Cerniglia, 2018), supports the objective of the current study.

The current findings showed significant increase in psychological distress consequential into low emotional intelligence among the adolescents. Literature reveals that the availability of internet and its applications at doorstep, fallout into pitiable community dealings and scarce emotional firmness. Unendorsed and untraced access to an economical technological facility negatively affected their behaviors, attitudes and emotions (Hammissi et al., 2013). A study at China revealed significant relationship with internet addiction and surfacing of obsessions among the youth (Zhang, 2021).

The results of emotional intelligence, psychological wellbeing and internet addiction remained insignificant than expected. Which might be, reduced awareness regarding the psychological terminologies and emotional intelligence among adolescents. Since, in our academic setup, there are no syllabi designed for the adolescents, to provide insight concerning the cognitive health and protective managements.

In recent epoch, there is a need of consciousness amongst the adolescents to survive up with the precipitated use of internet. Rather to try to use technology into positive manner rather than an escape from real world. Today, the generation faces intricacy in emotional regulation as compared to their ancestors as well as there is marked decline in mental health. The reasons in existing literature support the opinion that in recent era the bloom in the hi-technology especially accessibility and convenience to electronic sources to children in early ages results in demise better and stable personality characteristics among young generation (Cimino&Cerniglia, 2018).

### **Ethical Consideration**

The study was approved by Advanced Studies and Research Board at its 132<sup>nd</sup> meeting of Sindh University Jamshoro. The researcher during study remained abreast with the ethical consideration by American Psychological Association (APA, 2020). Informed consent and confidentiality was maintained at priority.

## References

- Agbaria, Q., & Bdier, D. (2019). The association of Big five Personality traits and religiosity on internet addiction among Israeli-Palestinian Muslim college students in Israel. *Mental Health, Religion & Culture*, 22(9), 956-971.
- Amalu, M. N.(2018). Cyber bullying and psychological well-being among the undergraduates in the University of Calabar. *International Journal of Educational Benchmark (UEB)*, 9, 29- 40.
- Atroszko, P. A., EI Abiddine, f. Z., Malik, s., Mamun, M. A., Vally, Z., & Czerwinski, S. K. (2022). Lack of measurement invariance in a widely used Facebook addiction scale may thwart progress in research on social-network-use disorder: A cross-cultural study. *Computers in Human Behavior*, 128, 107132.
- Balci, S., Karakoc, E., & Nesrin, O. G. U. T. (2020). Psychological well-being as a Predictor of Social Media Addiction: A Survey on Health Workers. *Online Journal of Technology Addiction and Cyberbullying*, 7(1), 35-63.
- Block, G., Sternfeld, B., Block, C., Block, T., Norris, J., Hopkins, D.... & Clancy, H. (2008). Development of Alive! (A Lifestyle intervention via Email), and its effect on health-related quality of life, presenteeism, and other behavioral outcomes: randomized controlled trial. *Journal of medical Internet research*, 10(4), e1112.
- Brkljajic, T., Majetic, F., & Wertag, A. (2019). I'm Always online: well-being and Main Sources of Life Dis/Satisfaction of heavy internet users. *In Internet and Technology Addiction: Breakthroughs in Research and Practice* (pp. 455-472). IGI Global.
- Buneviciene, I., & Bunevicius, A. (2020). Prevalence of internet addiction in healthcare professionals: Systematic review and meta-analysis. *International Journal of Social Psychiatry*, 0020764020959093.
- Chhachhar, A. R., Khushk, G. M., Chachar, A. A., & Qureshi, B. (2013). Internet usage among university students in Pakistan. *Journal of Basic and Applied Scientific Research*, 3(9), 31-35.
- Chou, c. & Lee, Y. H. (2017). The moderating effects of internet parenting styles on the relationship between internet parenting behavior, Internet expectancy, and internet addiction tendency. *The Asia-Pacific Education Researcher*, 26(3), 137-146.
- Chuang, Y. C.(2006). Massively multiplayer online role-playing game-induced seizures: A neglected health problem in internet addiction. *CyberPsychology & Behavior*, 9(4), 451- 456.
- Cimino, S., & Cerniglia, L. (2018). A longitudinal study for the empirical validation of an etiopathogenetic model of internet addiction in adolescents based on early emotion regulation. *BioMed Research International*, 2018.
- Dogan, h., Bozgeyikli, H., & Bozdas, C. (2015). Perceived parenting styles as predictor of Internet addiction in Adolescents. *International Journal of research in Education and Science*, 1(2), 167-174.
- Dong , H., Yang, F., Lu, X., & Hao, W.(2020). Internet addiction and related psychological factors among children and adolescents in China during the coronavirus disease 2019 (COVID-19) epidemic. *Frontiers in Psychiatry*, 751.

- Ey, L. A., & Glenn Cupit, C. (2011). Exploring young children's understanding of risks associated with internet usage and their concepts of management strategies. *Journal of Early Childhood Research*, 9(1), 53-65.
- Farooq, T. (2017). Life without internet: A study from Kashmir. *Life*, 2(2).
- Far, N.S., Samarein, Z.A., Yekleh, M., Tahmasebi, S., & Yaryari, F.(2014). Relationship between the components of emotional intelligence and internet addiction of students in Kharazmi University. *Int J Psychology Behavior Res*, 3(1), 60-66.
- Goleman, D. (1995). Emotional Intelligence. New York, NY, England..
- Gunlu, A., & Bas, A.U. (2022). Relationship Between Personality Traits and Internet Addiction.
- Haagsma, M. C., Caplan, S. E., Peters, O., & Pieterse, M. E.(2013). A cognitive-behavioral model of problematic online gaming in adolescents aged 12-22 years. *Computers in human behavior*, 29(1), 202-209.
- Hammissi, J., Babaie, M., Hosseini, M., & Babaie, F.(2013). The relationship between emotional intelligence and technology addiction among university students. *International Journal of Collaborative Research on Internal Medicine & Public Health*, 5(5), 0-0.
- Internet World Stats: World internet Users and Population Statistics. 2017.  
Retrieved from, [www.internetworldstats.com/stats.htm](http://www.internetworldstats.com/stats.htm)
- Jain, A., Sharma, R., Gaur, L., Yadav, N., Sharma, P., Sharma, N., & Yadav, K. S.(2020). Study of internet addiction and its association with depression and insomnia in university students. *Journal of Family Medicine and Primary Care*, 9(3), 1700.
- Karakose, T. (2022). Assessing the Relationships between Internet Addiction, Depression, COVID-19 Related Fear, Anxiety, and Suspicion among Graduate Students in Educational Administration: A Structural Equation Modeling analysis. *Sustainability*, 14 (9), 5356.
- Karababa, A. (2020). Examining internet addiction of early adolescents in terms of parenting styles. *Turk Psikolojik Danisma ve Rehberlik Dergisi*, 10(57), 229-254.
- Khan,R. A., & Kamal, A. (2010). Self-Report Measure of Emotional Intelligence. *National Institute of Psychology*. Quaid-i-Azam University, Islamabad Pakistan.
- Khasawneh, A. I., Humeidan, A. A., Alsulaiman, J.,W., Bloukh, S., Ramadan, M., Al-Shatanawi, T. N., ...& Kherallah, K. A. (2020). Medical students and COVID-19: knowledge, attitudes, and precautionary measures. A descriptive study from Jordan. *Frontiers in public health*, 8, 253.
- Khan, N., Ray, L., zhang, S., Osabuohien, E., & Ihtesham, M. (2022). Influence of mobile phones and internet technology on income of rural farmers: Evidence from Khyber Pakhtunkhuwa Province, Pakistan. *Technology in Society*, 101866.
- Kim, K., Lee, h., Hong, J., Cho, M. J., Fava, M., Mischoulon, D.... & Jeon, H. J. (2017). Poor sleep quality and suicide attempt among adults with internet addiction: A nationwide community sample of Korea. *PLoS one*, 12(4), e0174619.
- Kol, E., & Topgul, S. (2022). Internet Addiction as a Behavioral Addiction: The Effect of Computer Games on Children and cyber Violence. *In Handbook of Research on Digital Violence and Discrimination Studies*(pp. 352-373). IGI Global.

- Kratzer, J., Leenders, R. T. A., & Van Engelen, J. M. (2008). The social structure of leadership and creativity in engineering design teams: An empirical analysis. *Journal of Engineering and Technology Management*, 25(4), 269-286.
- Krishnamurthy, S., & Chetlapalli, S. K. (2015). Internet addiction: Prevalence and risk factors: A cross-sectional study among college students in Bengaluru, the Silicon Valley of India. *Indian journal of public health*, 59(2), 115.
- Kuem, J., & Ray, S. (2021). Personality Antecedents and Consequences of Internet Addiction Vis-à-vis Internet Habit: a Theory and an Empirical Investigation. *Information Systems Frontiers*, 1-16.
- Kuss, D. J., Griffiths, M. D., & Binder, J. F. (2013). Internet addiction in students: Prevalence and risk factors. *Computers in Human Behavior*, 29(3), 959-966.
- Kwon, J. H., Chung, C. S., & Lee, J.(2011). The effects of escape from self and interpersonal relationships on the pathological use of internet games. *Community mental health journal*, 47(1), 113- 121.
- LaRose, R., Mastro, D., & Eastin, M.S.( 2001). Understanding Internet usage: A social – cognitive approach to uses and gratifications. *Social science computer review*, 19(4), 395-413.
- Leung, L., & Lee, P.S. (2012). The influences of information literacy, internet addiction and parenting styles on internet risks. *New media & society*, 14(1), 117-136.
- Lin , B., & Wu, S.(2020). COVID – 19( coronavirus disease 2019): opportunities and challenges for digital health and the internet of medical things in China. *Omics: a journal of integrative biology*, 25(5), 231-232.
- Lin, Y. J., Hsiao, R. C., Liu, T. L., & Yen, C. F.(2020). Bidirectional relationships of psychiatric symptoms with internet addiction in college students: A prospective study. *Journal of the Formosan Medical Association*, 119(6), 1093-1100.
- Luppicini, R., & Alotaibi, S. (2021). A Systematic Research Review of Internet Addiction and Identity. *International Journal of Cyber Behavior, Psychology and Learning (IJCBL)*, 11(1), 1-19.
- Maddi, S. R., Erwin, L. M., Carmody, C. L., Villarreal, B. J., White, M., & Gundersen, K. K. (2013). Relationship of hardiness, grit, and emotional intelligence to internet addiction, excessive consumer spending and gambling. *The journal of Positive Psychology*, 8(2), 128-134.
- Maghsoudi, S., Rehim, M., Emami Sigaroodi, A., & KazaemNezhadLeily, E. (2015). Identity styles and academic status of Gilan University of medical sciences. *Journal of Holistic Nursing And midwifery*, 25(2), 24-32.
- Mahadevaswamy, P., & D' souza, L. (2017). Effects of internet addiction on psychological well- being among adolescents. *International journal of psychology and Psychiatry*, 5(2), 76-86.
- Mamun, M. A., Hossain, M. S., Moonajilin, M. S., Masud, M. T., Misti, J. M., &Griffiths, M. D. (2020). Does loneliness, self esteem and psychological distress correlate with problematic internet use? A Bangladeshi survey study. *Asia-Pacific Psychiatry*, 12(2), e12386.

- Mascia, M. L., Agus, M., & Penna, M. P. (2020). Emotional intelligence, self regulation, smartphone addiction: which relationship with student well-being and quality of life? *Frontiers in psychology*, *11*, 375.
- Nemati, Z., & Matlabi, H. (2017). Assessing behavioral patterns of internet addiction and drug abuse among high school students. *Psychology research and behavior management*, *10*, 39.
- Niaz, U. (2008). Addiction with internet and mobile: An overview. *Journal of Pakistan Psychiatric Society*, *5*(2), 72.
- Niu, H. J., & Chang, C. T. (2014). Addiction in cyberspace: Flow experience on e-shopping. *International journal of Web Based Communities*, *10*(1), 52-68.
- Pan, N., Yang, Y., Du, X., Qi, X., Du, G., Zhang, Y., Li, X., & Zhang, Q. (2018). Brain Structures Associated with Internet Addiction Tendency in Adolescent Online Game Players. *Frontiers in psychiatry*, *9*, 67. <https://doi.org/10.3389/fpsy.2018.00067>
- Paudel, K., Adhikari, T. B., Khanal, P., Bhatta, R., Paudel, R., Bhusal, S., & Basel, P. (2022). Sleep quality and its correlates among undergraduates medical students in nepal: A cross-sectional study. *PLOS Global Public Health*, *2*(2), e0000012.
- Ponnusamy, S., Iranmanesh, M., Foroughi, B., & Hyun, S. S. (2020). Drivers and outcomes of instagram ,Addiction: Psychological well being as moderator. *Computers in Human Behavior*, *107*, 106294.
- Prizant-Passal, S., Shechner, T., & Aderka, I. M. (2016). Social Anxiety and internet use-A meta-analysis: what do we know? What are we missing? *Computers in Human Behavior*, *62*, 221-229.
- Ravulakollu, K. K., Chhabra, M., Sharan, B., Agarwal, R., Dewan, R., & Goyal, M. (2022). Mobile Continuum: Necessity or Addiction-A Review. In *2022<sup>9th</sup> International Conference on Computing for Sustainable Global Development (INDIA COM)* (pp. 585- 589). IEEE.
- Rehman, A., Shafi, H., & Rizvi, T. (2016). internet addiction and psychological well being among youth of Kashmir. *Int J Indian Psychology*, *3*(3), 6-11.
- Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. *Journal of Personality & Social Psychology*.
- Salek Ebrahimi, L., Ahmadi, G., Masjedi Arani, A., & Mousavi, S. E. (2019). Predicting Internet Addiction in Medical Students by General Self-Efficacy, Difficulty Emotion Regulation, and Resilience. *Practice in Clinical Psychology*, *7* (3), 167-174.
- Samantray, S. (2015). Internet Addiction and Relationships: The Psychology behind It. *MOJ Addiction Medicine Therapy* *3*, no. 1 (2015).
- Sharma, A., & Sharma, R. (2018). Internet Addiction and Psychological wellbeing among college students: A cross-sectional study from Central India. *Journal of family medicine and primary care*, *7*(1), 147. Doi 10.4103/jfmpc.jfmpc\_189\_17
- Sibi, N. L. G. (2018). Study on blue whale game in social media and its impact in India. *Research Journal of Humanities and Social sciences*, *9*(1), 189-195.
- Surdea Garcia, I., Lopez Penades, R., Rodriguez Rodriguez, R., & Sureda Negre, J. (2020). Cyberbullying and internet addiction in gifted and non gifted teenagers. *Gifted Child Quarterly*, *64*(3), 192-203.

- Tokuanga ,R. S.( 2017). A meta-analysis of the relationships between psychosocial problems and internet habits: Synthesizing internet addiction, problematic internet use, and deficient self-regulation research. *Communication Monographs*, 84(4), 423-446.
- Vakili. K. (2017). Investigating the Effect of Internet Addiction on Academic Anxiety among Second Grade High School Female Students in the Academic Year 2015- 2016. *Journal of Administrative Management, Education and Training*, 13, 220-226.
- Wenkai, S., Xiaohong, W., Huiwen, X., Huishi, L., Liao, S., & Fei, H. (2022). The role of interpersonal alienation in the relationship between social media addiction and learning burnout among Chinese secondary school students. *Children's Health Care*, 1-24.
- Yam, C. W., Pakpour, A. H., Griffiths, M. D., Yau, W. Y., Lo, C. L. m., Ng, I. M., ... & Leung, H. (2019). Psychometric testing of three Chinese online-related addictive behavior instruments among Hong Kong university students. *Psychiatric quarterly*, 90(1), 117- 128.
- Yao, M. Z., & Zhong, Z. J. (2014). Loneliness, social contacts and Internet addiction: A cross-lagged panel study. *Computers in Human Behavior*, 30, 164-170.
- Young, K.S. (1997, August). What makes on-line use stimulating: Potential explanations for pathological Internet use? In 105th annual conference of the American Psychological Association (vol. 15, pp. 12-30). Chicago.
- Zaffar, M., Mahmood, S., Saleem, M., & Zakaria, E. (2015). Face book addiction: relation with depression, anxiety, Loneliness and academic performance of Pakistani Students. *Science International (Lahore)*, 27 (3), 2469-2475.
- Zarei, S., Azodi, P., Fatahi, T., Azodi, F., Mahmoodi, m., & Jahanpour, F. (2022). Relationship between internet addiction and identity styles in Bushehr University of medical sciences students. *Journal of education and Community Health*, 8(1), 29-33.
- Zhang, Y. (2021). Direct and indirect effects of neuroticism on Internet addiction in college students: A structure equation modeling analysis. *Psychological reports*, 124(2), 611-626.