Iranian Journal of Educational Sociology

(Interdisciplinary Journal of Education)
Available online at: http://www.iase-idje.ir/
Volume 6, Number 3, September 2023

Presenting a Management Model for the Prevention of Cyber Addiction in the Youth of Zanjan Province

Hadi Abedzadeh[1], Amineh Ahmadi[2*], Mojtaba Moazzami[3]

1. PhD Student, Department of Educational Management, Kish International Branch, Islamic Azad University, Kish Island, Iran.
2. Associate Professor, Department of Psychology, South Tehran Branch, Islamic Azad University, Tehran, Iran (Corresponding Author).
3. Assistant Professor, Department of Education Management, North Tehran Branch, Islamic Azad University, Tehran, Iran.

Article history:
Received date: 2023/08/15
Review date: 202309/24
Accepted date: 2023/10/14

Keywords:
cyber space management, cyber addiction, prevention management

Purpose: The purpose of this research is to provide a management model for preventing cyber addiction in the youth of Zanjan province.

Methodology: The present research is applied in terms of purpose and descriptive-survey in terms of research implementation method; And it is specifically based on structural equation modeling. The statistical population of the research includes teachers, educational and research assistants and managers of education and schools in Zanjan province, and according to Cochran's formula, 370 people were selected as a sample. Sampling was done by simple random method. The collection tool in this research is a researcher-made questionnaire derived from the qualitative method. To analyze the data from the confirmatory factor analysis tests to examine the research question using SPSS version 23 software; Structural method was used to compile the model and AMOS software was used to design the final research model.

Findings: The findings of the research showed that the components of family factors, individual factors, attractions of virtual space, lack of media literacy, social conditions, cultural environment, social policies, unemployment and poverty, social participation, family education, life skills education, cultural and sports facilities, virtual space management, increasing efficiency, promoting mental health have a good fit in the measurement models.

Conclusion: In order to prevent the disintegration of families, parents must be somewhat familiar with and aware of today's technologies.

Please cite this article as: Abedzadeh, H., Ahmadi, A., & Moazzami, M. (2023). Presenting a Management Model for the Prevention of Cyber Addiction in the Youth of Zanjan Province, **Iranian Journal of Educational Sociology.** 6(3): 216-225.

1. Corresponding Author: ahmadi_a30203@yahoo.com

[DOI: 10.61186/ijes.6.3.216]

1. Introduction

Nowadays, the Internet is a tool with fast-paced and efficient characteristics, and has dominated various fields such as academia, social communications, entertainment, and commerce, due to its affordability and easy accessibility (Tas, 2017). The Internet has deeply and significantly influenced human experiences and modern life. The use of the Internet has become a crucial part of our daily lives and people can solve many of their daily problems or acquire information by using the Internet. The Internet increases the quality of life and well-being for many people. However, excessive use can lead to many adverse consequences for healthy growth and mental health (Salmani Galian, 2022). Alongside extensive access to the Internet, we are witnessing a new type of addiction, called "Internet addiction," which is a particular issue of the information age. Like all other addictions, Internet addiction is accompanied by symptoms such as anxiety, depression, irritability, restlessness, obsessive thoughts, or Internet fantasies. On the one hand, while the relationships of these individuals (especially children and adolescents) are increasing in the cyber world, their relationships in the real world are diminished. Moreover, there is a possibility of detrimental effects on academic performance (Ayub et al, 2023). Compulsive Internet Use or Problematic Internet Use (PIU) is addiction to cyberspace or the Internet, in which the individual is dependent on spending extended periods of time in the Internet or on social networks, online games, etc. to cope with life stresses, to the extent that it harms their relationships, work, and health. Experts who recognize Internet addiction classify it as an obsessive-compulsive disorder or an impulse control disorder. Internet Addiction, compulsive computer use, pathological Internet use, and Internet dependency are also referred to (Zhang, 2021). Internet addiction can be defined as a type of excessive Internet use that can create psychological, social, academic, or occupational problems in an individual's life. Some believe that when Internet use is considered a type of addiction, it can significantly impact the lives of the individual and those who associate with him or her (Rezazadeh et al, 2021).

Internet addiction has become a significant concern with various negative consequences among the young generation in modern society today, and it has been the subject of many studies and discussions (Wang, 2019). Cyber addiction is defined by phrases resulting from excessive use of the Internet or unreasonable and pathological use of the Internet. Sometimes this disease is also referred to as Internet addiction disorder or cyber addiction. Cyber addiction includes addiction to chat rooms (clubhouses), social media (Telegram, Instagram, WhatsApp, etc.), online games, sexting, and online gambling, which can pave the way for destruction of mental health, emotions, and ultimately the spiritual and mental well-being of individuals (Hajizadeh Meymandi, 2016). Internet addiction is defined as the misuse of this technology and its excessive and uncontrollable use, which is accompanied by negative consequences (Musavi, 2020). Excessive addiction to cyberspace can lead to psychological problems such as depression, anxiety (Boonvisudhi et al, 2017), and academic decline during the educational period (Kuss et al, 2016). In addition, with the increase in addiction to cyberspace, procrastination behaviors and psychological disorders increase, causing dissatisfaction among important people in life such as parents and friends (Kim et al, 2017); therefore, excessive and inappropriate use of the Internet disrupts serious disorders in various aspects of life and negatively affects the quality of life (Musavi, 2020).

With the onset of the COVID-19 epidemic worldwide, health protocols emphasized social distancing (Sajed & Amgain, 2020). In this regard, in many countries, in order to reduce the transmission of the coronavirus, face-to-face education in schools and universities was suspended. To prevent interruptions in the education of students and learners during the periods of social distancing, various solutions such as education in cyberspace were proposed so that the curriculum could continue according to the pre-planned program (Viner et al, 2020). The current change in approach from the standpoint of dealing with COVID-19 and from the perspective of changes in the educational system towards higher efficiency in the prevention and confrontation of global threats and crises such as COVID-19 is noteworthy. COVID-19, with its worldwide closures, posed a serious challenge to the economy, culture, education, sports, and other areas of life and

[DOI: 10.61186/ijes.6.3.216]

created a new lifestyle for people in different parts of the world. The transformation created by this home-based education was significant (Mirzaei, 2020).

Many businesses have moved from physical to cyber space due to the conditions of the COVID pandemic, or have experienced short and long-term closures. The characteristics of communication through computers and mobile phones, the expansion and intensification of the cyber space in people's daily lives to establish communication, conduct administrative affairs, do business, and transfer education from in-person to online in cyber space, all of which have occurred continuously since the outbreak of the COVID virus in 2019 in the global community and especially in Iran.

The series of events and incidents mentioned has led to an increasing dependence on cyber space in everyday life, and a greater addiction to cyber space among Iranian youth as a growing phenomenon in society. The transfer of education to cyber space and the development of social networks, their greater prevalence and use as a business space, and sharing experiences have led to more hours of use of cyber space and a type of addiction to it among young people. The pandemic and the transfer of education to cyber space, as well as the prosperity of other uses of cyber space such as communication, recording memories, sharing experiences, viewing and reviewing, buying, education, and more have caused an increase in the use of cyber space among young people in Zanjan province, as in other parts of the country. This can inadvertently bring other problems and challenges, such as trapping young people in cyber addiction. Therefore, cyber addiction should be placed at the center of attention of the education system and other human development institutions in the country and in Zanjan province.

Therefore, the researcher tries to answer the question of what the model of cyber addiction prevention management is in young people of Zanjan province.

Literature Review

In recent years, the Internet has become the most important scientific and recreational tool for students and scholars around the world (Hamidi et al, 2019). The Internet has revolutionized communication by removing distance and time. The ubiquitous and omnipotent influence of the Internet on various aspects of life is such that quality of life without it will be affected (Pontes et al, 2015). Internet addiction is a new form of addiction to network-connected devices and excessive and uncontrollable Internet use, which has many negative consequences, especially in the realm of social relationships. Internet addiction currently has the fastest growing addiction rates and has garnered global attention due to its increasing prevalence (Salmani Galian, 2022). Internet addiction refers to a wide range of behavioral and impulse control problems related to Internet use. Internet addiction can manifest as compulsive behavior, a desire for connectivity, a reflection or amplification of special relationships, or an attempt to fulfill needs. Holmes defines Internet addiction by referring to normal and natural Internet use and says that if an individual uses the Internet for less than 19 hours per week, then they are considered to be using the Internet normally; therefore, according to Holmes, someone who uses the Internet for more than 19 hours per week is addicted to the Internet (Azari et al, 2019).

The term Internet addiction refers to excessive involvement in online behaviors, including gaming, with common signs of addiction. Internet addiction can include addiction to online gaming, chat rooms, cybersex, and online gambling. The various uses and attractions of the Internet have led to the emergence of Internet addiction in recent years. People in this state spend hours and days engaging in networked relationships and cannot break off these connections. They have no interest in leaving the computer and fall behind in natural activities of life, experiencing problems such as sleep disturbances and neglecting school assignments in students and scholars. Internet addiction is currently a major problem in all societies, and identifying the causes, consequences, and side effects has been emphasized by researchers (Akhtari & Akhtari, 2023).

[DOI: 10.61186/ijes.6.3.216]

Research Background

Rezaei et al., (2023) examined the relationship between Internet addiction and aggression in 14 to 18-year-old adolescents in the city of Mashhad during the academic year of 2021-2022. The results of data analysis showed a significant and positive relationship between Internet addiction and adolescent aggression in Mashhad during the academic year of 2021-2022.

Ma & Gu (2023) investigated the relationship between Internet use and depression in adolescents: evidence from China. The findings showed that adolescents who spend longer online using mobile phones tend to have higher levels of depression. Adolescents who participated in online activities related to gaming, shopping, and entertainment had more severe symptoms of depression, but the time spent on online learning did not have a significant relationship with their depression levels. These findings demonstrate a dynamic relationship between Internet activity and adolescent depression and provide policy implications for addressing depression symptoms in adolescents. Specifically, Internet and youth development policies and public health programs during the COVID-19 pandemic should be designed based on a comprehensive account of all aspects of Internet activity.

Tunney & Rooney (2023) explored the use of theoretical models of problematic Internet use for informing psychological formulation: a systematic review. The results showed that out of 1412 initial search results, eighteen theories were included in the study. Nine theories were related to generalized PIU, seven theories were related to specific issues of Internet use, such as online gaming or social media, while two theories considered both generalized and specific perspectives. The data were analyzed using formulaic psychological formulation synthesis analysis (FBTA) for extracting theoretical elements under standard titles of predisposing, precipitating, maintaining, and protective factors. As a result, the lack of protective factors against PIU was a prominent finding. The usefulness of the psychological formulation approach, particularly in a conceptually and despondently rich area with traditional medical classification systems, was emphasized.

Bağatarhan & Siyez (2022) investigated the effectiveness of a cognitive-behavioral prevention program for Internet addiction. Based on the findings, health professionals are recommended to be aware of using a cognitive-behavioral approach for preventing Internet addiction in young people.

Seyed Ghale et al., (2022) explored the prevalence of Internet addiction and some related factors among students of Isfahan University of Medical Sciences during 1398-1399. The findings showed a significant relationship between the faculty of study and place of residence with Internet addiction among individuals, such that Internet addiction was higher in students of medical and health faculties and among dormitory residents. Considering that Internet addiction is more prevalent among dormitory residents and some faculties, it is expected that educational programs for proper use of the Internet will be held in the future, and more recreational programs and facilities will be provided to prevent wasting their time.

Rezazadeh et al. (2021) examined the relationship between Internet addiction and various dimensions of family functioning in adolescents. The findings showed that almost all dimensions of family functioning, including "communication, role, emotional support, emotional cohesion, behavioral control, and overall performance", had a significant and positive correlation with Internet addiction. Given the significant relationship between different dimensions of family functioning and Internet addiction, the better the abilities of roles, emotional support, emotional cohesion, and behavioral control in families, the lower the incidence of Internet addiction among students. Therefore, family functioning can be a meaningful predictor of Internet addiction in adolescents.

2. Methodology

The research methodology was quantitative, applied, and descriptive in nature and employed a survey approach. The statistical population of the research included teachers, educational and research deputies, and educational and training managers and schools in Zanjan province, with a total of 10511 individuals. A sample size of 370 individuals was selected using simple random sampling, and the data collection tool was a

[DOI: 10.61186/ijes.6.3.216]

self-designed questionnaire distributed in the statistical population. The data collection method was a combination of field and library research. SPSS software was used for statistical inference analysis, and after discovering the factor structure of the model, confirmatory factor analysis was conducted using AMOS software.

3. Findings

In order to test the research question, structural equation modeling was utizilied using AMOS.The findings of the study were obtained through the questionnaire designed based on the qualitative section of the research, and the relevant component indices were subjected to statistical analysis. Two partial indices of critical value and significance level were used to test the research question. The critical value is the value obtained by dividing the estimated weight of regression by the standard error. According to the 0.05 level of significance, the critical path must be greater than 1.96 or less than -1.96; otherwise, the corresponding parameter is not significant in the model. Smaller values of 0.05 indicate a significant difference between the calculated regression weights and the value of zero at the 99.0 level of confidence.

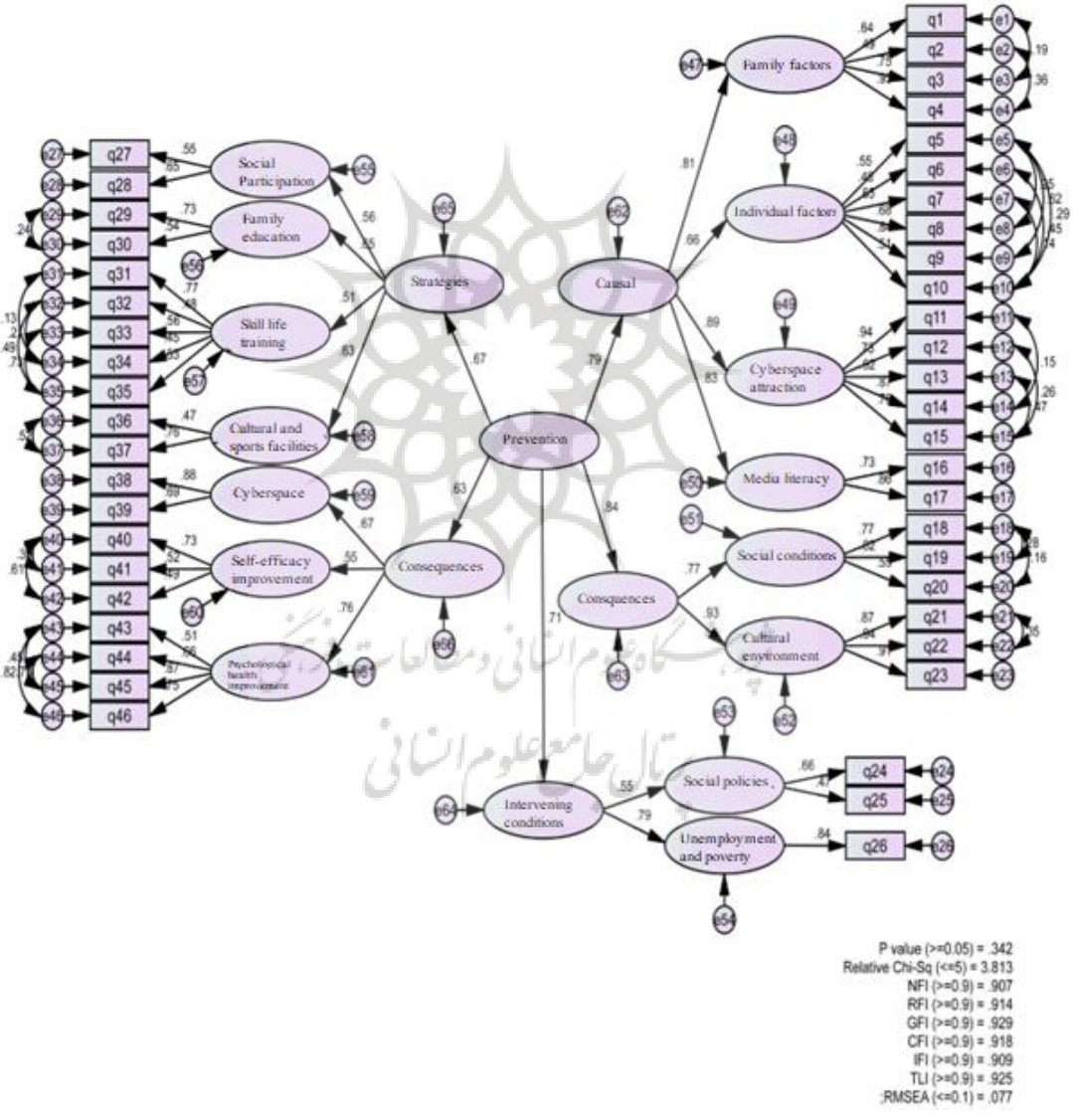

Figure 1. Second-order confirmatory factor analysis model for cyber addiction prevention management among youths in Zanjan province

[DOI: 10.61186/ijes.6.3.216]

Table 1 presents the fit indices for the structural equation modeling. As can be seen, the research model exhibits good fit, and the indices are well-supported by the data.

Table 1. Fit indices for the structural equation modeling

	P	CMIN/DF	GFI	IFI	TLI	CFI	RMSEA
Model	0.342	3.813	0.929	0.909	0.925	0.918	0.077
Sig.	<0.05	<5	<0.9	<0.9	<0.9	<0.9	<0.1
Results	Approved	Approved	Approved	Approved	Approved	Approved	Approved

According to the results in the tables, the relative chi-square indices in the second-order factor model were less than 5, which indicates acceptable fit. The Tucker-Lewis index and the scale fit index values were also above 0.9, indicating good fit. The parsimony goodness-of-fit index had a higher value than 0.5, suggesting good fit and desirability. Additionally, the root mean square error of approximation, as the most important fit index, was less than 0.08, indicating overall suitable fit of the model. The factor loadings and the validity and reliability indicators for the cyber addiction prevention management model using black scale items for youths in Zanjan province are presented in Table 2.

Table 2. Factor loadings and validity and reliability indices for the items of the cyber addiction prevention management model in the youth of Zanjan province

Cluster	Dimension	Component	AVE	Alpha Chronbach	Composite Reliability	Factor loadings	Items
Phenomenon (cyber addiction prevention management model in the youth of Zanjan province)	Causes	Family factors	0.5880	0.954	0.955	0.63	Unfamiliarity of families with new technologies
			0.6128	0.811	0.813	0.46	Lack of positive coping skills training
			0.5326	0.773	0.775	0.72	Parenting styles
			0.5782	0.790	0.801	0.91	Family disintegration
		Individual Factors	0.5543	0.843	0.844	0.52	Personality traits
			0.5323	0.858	0.860	0.45	Academic decline
			0.5909	0.860	0.861	0.66	Real-life failure
			0.5022	0.870	0.872	0.67	Failure to form a desirable identity in adolescents
			0.5866	0.766	0.767	0.88	Filling leisure time
			0.5992	0.800	0.802	0.49	Escaping daily problems
		Cyberspace attraction	0.5209	0.773	0.775	0.93	Increased awareness and information
			0.5772	0.911	0.913	0.77	Freedom of information flow
			0.5989	0.759	0.761	0.95	Ease of polling and evaluation
			0.6082	0.784	0.785	0.81	Use of film, photos, and text
			0.6145	0.755	0.756	0.79	Rapid dissemination of news and events
		Lack of media litracy	0.6672	0.705	0.707	0.74	Media illiteracy
			0.5122	0.855	0.857	0.85	Unawareness of negative consequences
	Context	Social conditions	0.6017	0.794	0.800	0.79	Lifestyle change
			0.5997	0.804	0.806	0.84	Merging of cyberspace with people's lives
			0.5704	0.899	0.901	0.56	COVID-19 pandemic
		Cultural environment	0.5880	0.858	0.859	0.88	Cultural facilities
			0.6128	0.954	0.955	0.83	Universal duty to

[DOI: 10.61186/ijes.6.3.216]

						enhance insight and awareness in cyberspace
		0.5326	0.811	0.813	0.89	Cyberspace in the service of high goals
Intervening factors	Social policies	0.5782	0.773	0.775	0.65	Negative policies
		0.5543	0.790	0.801	0.45	Positive policies
	Unemployment and poverty	0.5323	0.843	0.844	0.86	Unemployment and poverty
Strategies	Social participation	0.5909	0.858	0.860	0.51	More presence in the real world
		0.5022	0.860	0.861	0.64	Participation in national and religious ceremonies
	Family education	0.5866	0.870	0.872	0.71	Technical familiarity with cyberspace
		0.5992	0.766	0.767	0.53	Cyberspace vulnerability assessment
	Life Skills Training	0.5209	0.800	0.802	0.75	Critical thinking
		0.5772	0.773	0.775	0.45	Communication skills
		0.5989	0.911	0.913	0.53	Problem-solving skills
		0.6082	0.759	0.761	0.47	Stress management
		0.6145	0.784	0.785	0.55	Media literacy education
	Cultural and sports facilities	0.6672	0.755	0.756	0.49	Promotion of reading culture
		0.5122	0.705	0.707	0.77	Providing suitable sports facilities
Consequences	Cyberspace management	0.6017	0.855	0.857	0.83	Time management
		0.5997	0.794	0.800	0.65	Media literacy
	Self-efficacy improvement	0.5704	0.804	0.806	0.74	Commitment and responsibility
		0.5880	0.899	0.901	0.51	Expertise creation
		0.6128	0.858	0.859	0.48	Creative thinking
	Psychological health improvement	0.5326	0.954	0.955	0.55	Improved quality of life
		0.5782	0.811	0.813	0.64	Creating a sense of value
		0.5543	0.773	0.775	0.88	Increased hope for life
		0.5323	0.790	0.801	0.75	Family warmth

4. Discussion

As individuals have more access to the Internet, social networks, and cyber messaging, we are observing a new type of addiction, called "cyber addiction," which is a special issue of the information era. Like other types of addictions, addiction to cyberspace also has symptoms, such as anxiety, depression, irritability, restlessness, obsessive thoughts, or fantasies about the Internet. While the relationships of these individuals, especially children and adolescents, are increasing in the cyber world, their relationships in the real world are decreasing. Young people may waste so much time in cyberspace that they do not have time for responsibility. However, with time management, one can significantly increase commitment and responsibility. Additionally, by obtaining extra time in this way, they can pursue acquiring specialized skills. Furthermore, since the world is rapidly advancing, and we all need to adapt ourselves to the changes in the world, we need to act wisely and creatively. With wise and creative thinking, we can respond correctly to life's problems and challenges. Therefore, individuals who have creative thinking tend to seek opportunities more and, as a result, can follow their dreams more than others. Research shows that appropriate school and family collaboration and proper management of the quantity and quality of cyber network use can effectively increase children's sense of worth and reduce their academic failures. The home environment

[DOI: 10.61186/ijes.6.3.216]

should be a safe space for young people to feel comfortable staying home and wanting to be with their parents. The first thing to create intimacy is having the necessary communication skills.

The findings of this research indicate that the factor loading of all indicators is higher than 0.3, which means the desirable status. Moreover, the convergent validity indexes are higher than 0.5, suggesting the desirability of the component validity. In addition, the values of Cronbach's alpha coefficient (over 0.7) and the composite reliability demonstrate the high accuracy of the measurement tool for each component and, in other words, the tool's stability related to them. The family factors, individual factors, cyberspace attractions, media illiteracy, social conditions, cultural environment, social policies, unemployment and poverty, social participation, family education, life skills education, cultural and sports facilities, cyberspace management, increasing efficiency, and promoting mental health are of good fit in the measurement model. These results are consistent with the findings of previous studies, such as Shakeri Asl et al. (2021), Rezvani & Parish (2021), Rezazadeh et al. (2021), Azari et al. (2019), Ahmadi et al. (2016), Bağatarhan & Siyez (2022), Chung et al. (2019), and Wang (2019). Rezazadeh et al. (2021) investigated the relationship between internet addiction and various dimensions of family function in adolescents in Khomeini Shahr. The findings indicated a positive and significant correlation between all family function dimensions, including "communication, role, emotional support, emotional cohesion, behavioral control, and overall function," and internet addiction. Given the significant relationship between the various dimensions of family function and internet addiction, the higher the abilities of role fulfillment, emotional support, emotional cohesion, and behavioral control in families, the lower the level of internet addiction among students will be, so family function can be a meaningful predictor of internet addiction behavior in adolescents. Bağatarhan & Siyez (2022) studied the effectiveness of a cognitive-behavioral prevention program for internet addiction. According to the findings, it is recommended that mental health professionals become knowledgeable about using a cognitive-behavioral approach to prevent internet addiction in adolescents. Chung et al. (2019) investigated "Internet addiction among adolescents in Hong Kong: prevalence, psychosocial correlates and prevention." They found that contrary to tobacco and alcohol, the Internet is a tool, and media literacy has become an essential skill. Based on current evidence, modifiable protective factors should be strengthened to control the problem.

According to this present research, it is suggested that in order to prevent family disintegration, parents should have some mastery over world-class technologies and be aware that changing children's behavior means changing their way of thinking, and when their intellectual and personal foundation is formed improperly, the infiltration of corrupt individuals into the privacy of individuals and the safe environment of the family becomes possible. They should spend more time with their children and provide healthy cultural and sports facilities. Using resources such as visual and auditory media, newspapers, magazines, and publications to institutionalize cyberculture for reducing addiction to cyberspace in young people can be helpful. It should be noted that all cultural and media officials, universities and seminaries, and education and training institutions and families have a double duty to promote culture and foster insight and awareness in the field of cyberspace. Adolescents' confusion, apathy, lack of purpose, and inadequate leisure time are due to the scarcity of the cultural sphere and it is necessary to provide adequate cultural facilities for everyone to break free from addiction. They spend more time with children outside of the home so that emotionally and psychologically, they do not feel a sense of emptiness and do not resort to cyberspace to compensate for this deficiency. Skills such as making friends, establishing social relationships, saying "no," critical thinking, and decision-making are important for living in society, and parents and adolescents and young people should receive proper education. Developing and promoting the culture of sports among families and addressing the problem of unemployment are essential for reducing addiction. We should not use mobile phones and cyberspace for at least half an hour before sleeping. Using mobile phones before sleep causes more agitation when we need peace before sleep. Creating delays in our actions, limiting incoming information from harmful networks, and replacing them with other activities such as sports and

[DOI: 10.61186/ijes.6.3.216]

walking in the park are other time management solutions in cyberspace. The home environment should be safe for young people where teenagers feel calm and desire to stay at home and be with their parents.

Ethical Considerations

All ethical considerations in terms of trust-building and respecting the privacy of participants have been observed.

Acknowledgments

The authors would like to thank the officials of the Education Department of Tabriz and the educational and executive staff of the selected schools in Tabriz for their cooperation in conducting this research. They would also like to express their gratitude to the participating students for completing the research tools.

Authors' Contributions

All authors have an equal share in the article.

Conflict of Interest

There is no conflict of interest among the authors.

References

Ahamdi, H., & Mansouri, F., & Shahcheragh, A. (2016). Investigating the harmful aspects of using virtual social networks among the youth of Kermanshah. 1 (2): 1-21 URL: http://jpsd.hormozgan.ac.ir/article-1-50-fa.html

Akhtari, M., & Akhtari, N. (2023). The role of self-regulation and self-efficacy in predicting Internet addiction in students of Azad Beile Savar University, the 12th International Conference on New Research Achievements in Educational Sciences, Psychology and Social Sciences, Tehran, https://civilica.com/doc/1708167 .(in Persian)

Ayub, S., & Jain, L., & Parnia, S., & Bachu, A., & Farhan, R., & Kumar, H., & Sullivan, A., & Ahmed, S. (2023). Treatment Modalities for Internet Addiction in Children and Adolescents: A Systematic Review of Randomized Controlled Trials (RCTs). Journal of clinical medicine, 12(9), 3345. https://doi.org/10.3390/jcm12093345.

Azari, T., & Azari, A., & Sabahizadeh, M. (2019). The relationship between internet addiction and exam anxiety, academic burnout and religious beliefs of high school female students in Bandar Kong. Studies in psychology and educational sciences (Nagareh Institute of Higher Education). 41. 23 to 50.https://www.noormags.ir/view/fa/articlepage/1487078/(in Persian)

Bağatarhan, T., & Siyez, D. M. (2022). The Effectiveness of a Cognitive-Behavioral Prevention Program for Internet Addiction. Journal of Rational-Emotive & Cognitive-Behavior Therapy,40(4). 1-26. DOI:10.1007/s10942-021-00439-7

Boonvisudhi, T., & Kuladee S.(2017). Association between Internet addiction and depression in Thai medical students at Faculty of Medicine, Ramathibodi Hospital. PLoS One. 2017; 12(3): 0174209. DOI: 10.1371/journal.pone.0174209

Chung, T. W. H., & Sum, S. M. Y., & Chan, M. W. L. (2019). Adolescent Internet Addiction in Hong Kong: Prevalence, Psychosocial Correlates, and Prevention. The Journal of adolescent health : official publication of the Society for Adolescent Medicine, 64(6S), S34–S43. https://doi.org/10.1016/j.jadohealth.2018.12.016

Hajizadeh Meymandi, M., & Vakili Ghasemabad, S., & Mirmangare, A,. (2016). Examining the relationship between socio-psychological factors and Internet addiction (case study: female students of Yazd University). Women's magazine in art culture; 8 (4): 473-92. magiran.com/p1699458 (in Persian)

Hamidi, M., & Jalalifarahani, M., & Rajabi, H., & Yousefjamal, F. (2019). Clarifying Association of Various Types of Social Skills, Self-efficacies, Lifestyles, with Internet Addiction Disorders (IAD) in High School Sport Students of Ilam Province . Journal title 2018; 26 (1) :1-12.URL: http://sjimu.medilam.ac.ir/article-1-4355-fa.html. (in Persian)

Kim, J. H., & Lou, C. H., & Cheuk K. K., & Kan P., & Hui, H., & Griffiths, S. M. (2009). Predictors of heavy internet use and associations with health-promoting and health risk behavior among Hong Kong university students. Journal of Adolescence, May, 10, 10-16. DOI: 10.1016/j.adolescence.2009.03.012

[DOI: 10.61186/ijes.6.3.216]

Kuss, D., & Lopez-Fernandez, O. (2016). Internet addiction and problematic Internet use: A systematic review of clinical research. World J Psychiatry.6(1):143-176. DOI: 10.5498/wjp.v6.i1.143

Ma, Y., & Gu, J. (2023). Internet and depression in adolescents: Evidence from China. Frontiers in psychology, 14, 1026920. https://doi.org/10.3389/fpsyg.2023.1026920

Mirzaei, H. (2020). Research in higher education, science and the Corona crisis in Iran, Cultural and Social Studies Research Institute, Tehran. (in Persian)

Mousavi, V. (2020). The prevalence of Internet addiction and the use of virtual social networks in Iranian teenagers and young people in 2017, Journal of Military Medicine, Volume 22, Number 3; 288-281. https://sid.ir/paper/362180/en. (in Persian)

Pontes, H., & Szabo, A., & Griffiths, M. (2015). The impact of Internetbased specific activities on the perceptions of Internet addiction, quality of life, and excessive usage: A crosssectional study. Addict Behavitor Reports. DOI: 10.1016/j.abrep.2015.03.002

Rezaei, B., & Momeni, K., & Ghane, M. (2023). The relationship between Internet addiction and aggression among 14-18-year-olds in Mashhad in the academic year 1400-1401, the first international conference of psychology, social sciences, educational sciences and philosophy, Babol, https://civilica.com.(in Persian)

Rezazadeh, M., & Fathian Dastgerdi, Z., & Heydari, Z. (2021) Investigating the relationship between Internet addiction and different dimensions of family functioning in teenagers of Khomeinishahr city. Health system research. 17 (4): 282-289. http://hsr.mui.ac.ir/article-1-1345-fa.html.(in Persian)

Rezvani, A., & Parish, F. (2021). A review of the harms of virtual space, internet and social networks on family relationships in research abroad, Art and Media Studies Quarterly, third year, fifth issue, pp. 123-154. https://ensani.ir/fa/article/465357/. (in Persian)

Sajed, AN., & Amgain, K. (2020). Corona Virus Disease(COVID-19) Outbreak and the Strategy for Prevention. Europasian Journal of Medical Sciences. 2(1). 1-4. DOI:10.46405/ejms.v2i1.38

Salmani Galian, S. (2022). The impact of Internet addiction on adolescents, the first conference of psychology, educational sciences, social sciences and humanities, https://civilica.com/doc/1625203

Seyed Ghale, F., & Talebi, N., & Khoshgovtar, M., & Pirzadeh, A. (2022). Investigating the prevalence of Internet addiction and some factors related to it among the students of Isfahan University of Medical Sciences during the years 2018-2019. Health system research. 18 (1): 1-7. http://hsr.mui.ac.ir/article-1-1259-fa.html.(in Persian)

Shakri Asl, S., Ganjali, M., Mutauri, F. and Mirzaei. N. (2021). The role of lifestyle on young people's cyberspace addiction during the Covid-19 pandemic, First National Conference on Futurology, Educational Sciences and Psychology. (in Persian)

Taş, İ. (2017). Relationship between internet addiction, gaming addiction and school engagement among adolescents. Universal Journal of Educational Research, 5(12), 2304-2311. DOI:10.13189/ujer.2017.051221

Tunney, C., & Rooney, B. (2023). Using Theoretical Models of Problematic Internet Use to Inform Psychological Formulation: A Systematic Scoping Review. Clinical child psychology and psychiatry, 28(2), 810–830. https://doi.org/10.1177/13591045221104569

Viner, RM., & Russell, SJ., & Croker, H., & Packer, J., & Ward, J., & Stansfield, C., & Mytton, O., & Bonell, C., & Booy, R. (2020). School closure and management practices during coronavirus outbreaks including COVID-19: a rapid systematic review. The Lancet Child & Adolescent Health. 4(5): 397–404 .DOI: 10.1016/S2352-4642(20)30095-X

Wang, W.-C. (2019). Exploring the Relationship Among Free-Time Management, Leisure Boredom, and Internet Addiction in Undergraduates in Taiwan. Psychological Reports, 122(5), 1651–1665. https://doi.org/10.1177/0033294118789034

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. https://doi.org/10.1177/0033294120918806

[DOI: 10.61186/ijes.6.3.216]