

Investigating the relationship between cyberspace addiction and quality of life with nomobile phone phobia in students

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Abstract:

Introduction: The fear of not being in touch and being separated from the smartphone causes complications in young people. The present study was conducted with the aim of identifying the relationship between cyberspace addiction and quality of life with nomophobia.

Materials and methods: The present study had the descriptive-analytical of correlational, and statistical population of research was medical students of Islamic Azad Universities of Mazandaran province. Studying in the first half of 2018 with a population of 2756 people, of which 340 people were determined using Morgan's Kargesi table as a sample. Research tools include WHOQOL-SF36 quality of life questionnaires, addiction to mobile-based virtual social networks by Khawaja Ahmadi et al. and mobile-free phobia. NMP-Q was Yıldırım and Korea. The data was analyzed using Spearman's correlation coefficient, Pearson's multivariate linear regression.

Findings: It showed that there is a significant and negative relationship between cyberspace addiction and quality of life ($P > 0.05$, $r = -0.38$), and a positive and significant relationship between cyberspace addiction and nomophobia ($P > 0.05$), $r = 0.52$) and a moderate and negative relationship was seen between the quality of life and venophobia at the rate of 0.23. The result of hierarchical linear regression by entering the variable of nomophobia emphasized the significant relationship between the two variables of cyberspace addiction and quality of life ($\text{sig} = 0.01$).

Conclusion: According to the results of the research, it can be said that with the increase in the amount of addiction to cyber space, the level of fear of mobile phones increases and the quality of life decreases. It is suggested that in order to improve the media literacy level of the society, especially the young generation of our country, to teach them the culture of choice and correct use of modern media be given.

Keywords: addiction to virtual space, no mobile phone phobia, quality of life, students

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Introduction:

Undoubtedly, one of the most attractive and practical communication technologies created by the human mind is the mobile phone, which alone is able to play several roles independently (1). This media, which is emerging in the present era, has facilitated human communication more than any other media. Statistics show that by 2021, the penetration rate of the Internet in the world will reach its highest level and the number of global Internet users from the border 59.51 percent (equivalent to 4.66 billion people out of 7.83 billion people in the world) has passed and the number of 5.22 billion users also use the benefits of mobile phones with internet and 66.6 percent of internet users spend nearly 7 hours online every day (2). Also, by the end of 2017, the penetration rate of mobile phones and internet in the country has reached 110 and over 90%, respectively (3). With the connection of the Internet to the mobile phone, a virtual space was created with a deep and wide scope in the lives of users, which sometimes seems difficult to separate from the real world, and according to a group of researchers in the field of communication, such immersion in the virtual space, users has moved towards a digital lifestyle (4). Researches show that the harmful and addictive use of smart phones in general among young people and especially students has brought adverse consequences (5, 6, 7, 8, and 9). In addition to jeopardizing the physical, mental and social health of users, which are health indicators of the quality of life in people, it made them unable to simply ignore the mobile phone, which has many attractions for them, and therefore a hidden fear in their existence. It is believed that deprivation and not having a mobile phone makes them suffer from a mental disorder called nomophobia. Psychological studies show that 70% of women and 61% of men are afraid of being without a mobile phone; 73% of people sleep with their mobile phones, and 53% of users feel anxious when the battery charge or their credit runs out or the mobile network is out of reach, and 68% of people with high sensitivity, vibration or ringtone of their phone. They feel before the phone call. It is interesting here that based on the polls of mobile phone users, 43% of iPhone users are willing to spend a week without shoes, but they don't stay away from their mobile phone temporarily, and 22% of mobile phone users prefer to stay away from their mobile phone. Avoid brushing their teeth (10). Several studies have pointed to the relationship between quality of life and cyberspace addiction. The results of Tonkmani et al.'s research titled the role of harmful use of virtual space in predicting students' quality of life indicated that there is a significant and inverse relationship between Internet addiction and physical and mental health aspects of students' quality of life, which means that with an increase the degree of Internet addiction reduces the physical and mental health of users (8). Although in the research of Doleh et al., entitled "Investigation of the role of virtual social networks in the quality of life of users aged 20 to 49 years living in Tehran", there is a significant relationship between the use of the network social and quality of life of users were not seen (11). The findings of Cecilia Cheng and Angel E Lam's study in 31 selected countries in seven regions of the world regarding the prevalence of Internet addiction and quality of life show that the Internet penetration rate and per capita percentage in these countries have a direct and significant relationship with Internet addiction. It means that the countries with more internet use had a general dissatisfaction with life, in such a way that the prevalence of internet addiction in countries had an inverse and significant relationship with their quality of life (12). Diomidis et al. in their study entitled "Social and psychological effects of using the Internet and virtual networks" listed some of the reasons for Internet addiction as online gambling, abuse, fraud and cyberbullying and virtual financial thefts and the decrease in mental health, weak relationships with family and Friends related the lack of attention to daily life and domestic and social responsibilities with the high use of mobile phones with internet and virtual social networks (7). A review of the research related to nomophobia shows that among different age groups, the young generation is more at risk and more effective from nomophobia than adults. Delavar et al.(2016) in a descriptive-correlational research with the title of investigating the relationship between the pattern of mobile phone consumption and the feeling of mobile phone phobia

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among mobile phone users on 250 citizens of Tehran City, concluded that the most used features of mobile phones are the use of Social networks. Also, nomobile phone phobia significantly predicts the behavior of using a mobile phone in such a way that with the increase in the level of anxiety of people due to the possibility of the unavailability of a mobile phone, the amount of its use increases (9). In this regard, the results of Ricardo Muench and Katrina Muench's research (2020) on 220 subjects with an average age of 27.89 showed that among the four predictive factors of nomophobia, which are inability to communicate, loss of connection with the online (social) world, the discomfort of losing universal access to information and giving up the smartphone facility, the first factor, the inability to communicate, has been mentioned as the reason for their fear of not having a mobile phone. They mentioned that the use of a smartphone not only leads to negative feelings in users, but the fear of not being in touch and being separated from the smartphone decreases mood, increases anxiety, increases blood pressure, and decreases performance (5). The research results of Gezgin et al. (2017) in a descriptive analytical study with the participation of 301 volunteers showed that when young people did not have access to significant information or it was not possible for them to communicate, they expressed a high average loneliness (6). Considering the significant growth in the use of mobile phones, especially its increasing prevalence among teenagers and young adults, and the growing concerns of many experts about the harmful effects of mobile phones such as dependence and addiction, psychological effects and adverse physical and physical consequences (13) and Also, the sometimes contradictory results obtained from the review of studies, the present research tries to evaluate the effects of three variables of cyberspace addiction, quality of life and nomophobia simultaneously, so that the results can be used by practitioners and policymakers in the fields of communication social sciences, psychology and medical sciences. Therefore, the following questions were answered in this research:

What is the relationship between virtual space and quality of life? What is the relationship between virtual space and nomophobia? What is the relationship between quality of life and nomophobia? What is the relationship between virtual space and quality of life with emphasis on nomophobia?

Research method:

The research method in this research is descriptive-analytical, of correlational type. For implementation, after obtaining written permission and approval from the university of the place of study (Tehran North), in order to carry out research, to the faculties of medical sciences of the Islamic Azad Universities of Mazandaran province (Babol, Sari, Chalos and Tonkabon branches) were referred. Then, observing the principles of ethics in the research (including the protection of the subjects' names, confidentiality of information, consent to participate in the research) and providing the necessary explanations on how to complete them, the questionnaires were distributed among the subjects. It should be noted that this research has a code of ethics. IR.IAU.SARI.REC number 1398-097. The statistical population of the research includes all medical students of the Islamic Azad University of Mazandaran province in the above four university units with comprehensive and very high academic degrees in the fields of medicine, nursing, midwifery, laboratory sciences and In the second half of the academic year 2017-2018, health included 2726 people. Taking into consideration the criteria for entering the research subjects, such as having a smart mobile phone and being in the clinical stage (that is, it is mandatory to attend hospitals and treatment centers, which included medical students up to the fifth semester and undergraduate students up to the sixth semester), the number of 340 people based on Kerejsie and Morgan table and were selected by stratified random sampling method (Table 1).

Table 1. Population size and statistical sample*

| University unit | Sari | | Tonkabon | | Challus | | Babol | | total | |
|---------------------|---------|--------|----------|--------|---------|--------|---------|--------|---------|--------|
| Field | Society | sample | Society | sample | Society | sample | Society | sample | Society | sample |
| Medical | 428 | 54 | 355 | 44 | - | - | - | - | 783 | 98 |
| Nursing | 291 | 32 | 166 | 22 | 214 | 25 | 258 | 30 | 929 | 109 |
| Midwifery | 150 | 19 | 121 | 15 | 127 | 16 | 142 | 20 | 550 | 70 |
| Laboratory sciences | 114 | 13 | 66 | 8 | 120 | 15 | 96 | 12 | 377 | 48 |
| public health | 92 | 15 | - | - | - | - | - | - | 92 | 15 |
| Total | 133 | | 89 | | 56 | | 62 | | 2731 | 340 |

*To be accurate in the measurement and with the aim of having complete samples, 370 questionnaires were distributed, and during data collection, unanswered and defective items were removed.

The data collection tool in this research consisted of three questionnaires: addiction to virtual social networks based on mobile, quality of life and nomophobia.

1- The mobile-based virtual social network addiction questionnaire designed and implemented by Khajeh Ahmadi et al. (2015) has 23 items in four subscales of individual performance (with nine items in items(2,5,8,11,15,18,19,20),time management (with six statements in items 3,4,6,7,10,12), self-control (with four statements in items 10,13,14,17) and social relations (with four statements in items 9,21,22,23). In the Likert scale, five options include I disagree (score 1), I somewhat disagree (score 2), I have no opinion (score 3), I somewhat agree (score 4) and I completely agree (score 5) was set. The minimum score of the questionnaire is 23 and the maximum score is 115, and the level of addiction to social networks is in four levels, including a user lower than usual (score 23-46), a normal user (score 46-69), and a user about to become addicted (69-92) and the addicted user (score 92-115) was described. In order to verify the validity of the content of the questions, they used three methods of face validity, content validity and construct validity, and finally after conducting factor analysis, they examined the internal consistency of the entire questionnaire. As a result, Cronbach's alpha coefficient in a sample of 260 medical students Bushehr was calculated for the whole questionnaire (0.927) and separately for each of the factors of the questionnaire with a minimum of 0.681 and a maximum of 0.907 (14). In the present research, the Cronbach's alpha coefficient for the individual performance scale was 0.907. Time management scale was 0.816; self-control subscale was 0.724; social relations subscale was 0.681.

2- WHOQOL-SF36¹ quality of life questionnaire consists of three physical, social and psychological related to health, which is physical function (PF) with items No.6, 7,8,9,10,11,12,13,14,15. Role play limitation due to physical reasons (PR) with items 16,17,18,19. Role play limitation due to emotional reasons (ER), with items 2,3,4..Energy/fatigue (EF) with items 23,27,29,31.emotional well-being (EW) with items 24,25,26,28,30, social functioning (SF) with items 20 and 32, physical pain (PP) with items 21 and 22 and general health (GH) with It measures 1,33,34,35,36 items. Also, from the integration of the subscales, two general subscales of physical health resulting from the sum of the subscales of physical functioning, role limitation due to physical reasons, physical pain and general

1. World Health Organization Quality of Life Short form 36

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health, and the subscale of mental health resulting from the sum of the subscales of social functioning, energy/fatigue Emotional well-being and limited role play are obtained for emotional reasons. The scoring method is as follows: in questions 1-5-20-21-22-34-36, option 1 was given 100 points, option 2 was given 75 points, option 3 was given 50 points, option 4 was given 25 points, and option 5 was given 0 points. In questions 6-7-8-9-10-11-12-13-14-15, option 1 was given 0 points, option 2 was given 50 points, and option 3 was given 100 points. In questions 2-3- 4-7-16-18-19, option 1 was given 0 points and option 2 was given 100 points. In questions 23-26-27-30, option 1 was given 100 points, option 2 was given 80 points, and option 3 was given 100 points. 60, option 4 was given 40 points, option 5 was given 20 points and option 6 was given 0 points. In questions 24-25-28-29-31, option 1 was given 0 points, option 2 was given 20 points, option 3 was given 40 points, option 4 was given 60 points, option 5 was given 80 points, and option 6 was given 100 points. And in questions 32-33-35, option 1 was given 0 points, option 2 was given 25 points, option 3 was given 50 points, option 4 was given 75 points, and option 5 was given 100 points. To obtain eight subscales, the questions related to each subscale were added and then divided by the number of questions. Therefore, each subscale was between 0 (minimum score) and 100 (maximum score). Also, the overall quality of life score was considered with a minimum score of 0 and a maximum score of 100, which was considered as unfavorable quality of life (score 1-33), relatively favorable ((score 34-66) and desirable (score 67-100). The design, validity, reliability and validity of this questionnaire have been investigated by Warver Sherbon in 1992 in the United States in different groups. Also, Motamed et al.(2004) for the first time in Iran, evaluated the validity and reliability of the SF-36 questionnaire on 134 people in the age group of more than 15 years. The reliability coefficient was 0.71 to 0.85 in seven optimal subscales and 0.65 only in the dimension of liveliness or vitality. (15). The reliability of the above questionnaire in this research was for the subscales of physical functioning, role limitation due to physical reasons, role limitation due to emotional reasons, energy/fatigue, emotional well-being, social functioning and physical pain. 0.90, 0.85, 0.77, 0.84, 0.65, 0.77 and 0.83 were estimated respectively.

3- Nomophobia Questionnaire (NMP-Q): This questionnaire has 20 items that measure the severity of nomophobia in four subscales: inability to access information (questions 1 to 4), loss of peace (questions 5 to 9), inability to communicate (questions 10 to 15) and loss of communication (questions 16 to 20) in the form of a seven-point Likert response spectrum from completely disagree (score 1) to very agree (7) in extreme cases. A higher score indicates a higher severity of nomophobia. This questionnaire, which was created in 2015 by Yildirim and Kuria, has high reliability (Cronbach's alpha 0.945) for all questions and 0.939, 0.487, 0.827 and 0.814 for each of the four subscales, respectively. The significance level ($P < 0.001$) indicated good and satisfactory internal consistency (16). In their research, Alizadeh et al.'s Cronbach's alpha coefficient for all items was 0.921 and for the factor of inability to communicate, loss of communication, inability In access to information and loss of peace, they estimated 0.885, 0.882, 0.748 and 0.788, respectively(17). To analyze the data, descriptive statistics (frequency, percentage of frequency and mean) and Spearman and Pearson correlation coefficient tests were used in the SPSS 23 environment.

Findings:

Descriptive indicators of the demographic variables of the research (frequency and frequency percentage) showed that the majority of the subjects in the age group of 20 to 24 years (78.5 percent), female (267 people equal to 72.9 percent), single (296 people equal to 78.1 percent) in the undergraduate education level (242 people, equivalent to 71.2 percent), with a duration of one hour of using a mobile phone per day (227 people, equivalent to 66.7 percent) and an average cost of 2 dollars

per month (261 people, equivalent to 76.8 percent) and Also, the duration of daily presence of one to three hours in virtual space (152 people, equivalent to 44.7) was due to being in a virtual group with friends (138 people, equivalent to 40.6 percent), and at least these demographic indicators were respectively: Over 30 years old (5 people equal to 1.5 percent), male (92 people equal to 27.1 percent), married (41 people equal to 12.1 percent), in medical education (98 people equal to 28.8 percent), with a duration of use of three hours a day. 21 people (equivalent to 2.2 percent) and the average monthly cost is more than 5 dollars (6 people, equivalent to 1.8 percent) and the duration of attendance is less than one hour (39 people, equivalent to 11.5 percent), which is due to escaping adversity (31 people, equivalent to 9.1.0%) were present in virtual space.

In order to know the normality of the distribution of the research variables, the Kolmogorov Smirnov test was used. The results indicated the normality of the mobile phobia variable (Sig=0.20) and the variables of cyberspace addiction (Sig=0.038) and quality of life (Sig=0.01) according to normality (Sig<0.05), did not have a normal distribution.

According to table 2, between the two variables of addiction to cyberspace and quality of life, a significant negative relationship was obtained with the intensity of 0.38 at the level of 0.01. It means that as the level of addiction to cyberspace increases in people, their quality of life decreases. Also, in order to better measure, the relationship between the variable of cyberspace addiction and the variable components of quality of life was measured through the Shapiro-Wilk test. The results show that cyberspace addiction has a stronger relationship with the respondents' mental health than It has a relationship with their physical health and this relationship is 0.41 and in a negative direction. In other words, the higher the level of cyberspace addiction among the sample population, the lower their mental health. It should be noted that among the sub-components of mental health, "emotional well-being" showed the highest relationship with addiction to virtual space with a rate of -0.38, and among the sub-components of physical health, "general health" with 0.28 was most related to cyberspace addiction.

Table 2. Correlation coefficient test between cyberspace addiction and quality of life components

| Variables | The value of Spearman's coefficient | Spearman's level of significance | The significance level SH-W | |
|--------------------------------|---|----------------------------------|-----------------------------|-------------|
| Physical health | -0.29 | 0.01 | 0.03 | |
| Addiction to cyberspace | 1- physical function | -0.16 | 0.01 | 0.01 |
| | 2- Limitation of role playing due to physical reasons | -0.24 | 0.01 | 0.01 |
| | 3- physical pain | -0.18 | 0.01 | 0.01 |
| | 4- general health mental health | -0.28 | 0.01 | 0.01 |
| | Mental health | - 0.41 | 0.01 | 0.01 |
| | 1- Role play limitation For | -.18 | 0.01 | 0.01 |
| | 2- Energy/fatigue | -.35 | 0.01 | 0.01 |
| | 3- Emotional well-being | -.38 | 0.01 | 0.01 |

| | | | |
|--------------------|-------|------|-------------|
| 4- Social function | -0.29 | 0.01 | 0.01 |
|--------------------|-------|------|-------------|

According to the figures in Table 3, addiction to virtual space has a significant relationship of 0.52 with nomophobia. In other words, as the amount of addiction to virtual space on mobile phones increases, the level of nomophobia also increases in the statistical population. The components of cyberspace addiction, "personal performance" had the most significant relationship with nomophobia at the rate of 0.49. Also, the component "Loss of comfort and comfort" showed the highest relationship with addiction to virtual space compared to other components with the intensity of 0.49. The next rank is the component "Fear of losing connection" with a relationship of 0.39 with cyberspace addiction; and this means that as the addiction to virtual space increases, the fear of losing comfort and the fear of losing connection increases.

Table 3. Correlation coefficient test between cyberspace addiction and mobile phobia and its components

| | Variables | Meaning Surface coefficient | Pearson's value |
|---------------------------|---------------------------------------|-----------------------------|-----------------|
| Components: | Addiction to cyberspace | 0.01 | 0.52 |
| | Individual performance | 0.01 | 0.9 |
| | Time Management | 0.01 | 0.42 |
| | Self-Control | 0.01 | 0.51 |
| | Community Relations | 0.01 | 0.35 |
| <u>Nomophobia:</u> | Fear of not being able to communicate | 0.01 | 0.37 |
| | Time Management | | 0.47 |
| | Self-Control | | 0.39 |
| | Fear of losing comfort | | 0.49 |

The figures in Table 4 show that there is a moderate negative correlation of 0.23 between the variables of quality of life and nomophobia. Among the components of quality of life, the "mental health" component, in comparison with "physical health", has a rate of -0.28 compared to nomophobia in The relationship is significant. It can be said that with the increase in mobile phone phobia, people's mental health decreases, and the reverse of this relationship is also true. The component of "physical health" has a significant relationship with nomophobia with a weak and negative relationship of 0.12. Among the sub-components of mental health, "energy/fatigue" and among the sub-components of physical health, "general health" have the most significant relationship with nomophobia at -0.27 and -0.20, respectively. Among the sub-components of quality of life, "physical function" and "restriction of playing a role due to emotional reasons" did not show a significant relationship with nomobile phone phobia.

Table 4. Correlation coefficient test between quality of life and mobile phone phobia and related components of each

| Variables | Pearson's value | Meaning Surface coefficient |
|---|-----------------|-----------------------------|
| Quality of life | -0.23 | 0.01 |
| A) Physical health | -0.12 | 0.02 |
| 1- physical function | 0.04 | 0.42 |
| 2- Limitation of role playing due to physical reasons | -0.13 | 0.01 |
| 3- physical pain | -0.16 | 0.01 |
| 4- general health | -0.20 | 0.01 |

H

Table 5 contains two parts, in the first part, the relationship between cyberspace addiction and quality of life is measured alone. The result shows that the significance of the test is 0.00 (Sig<0.05), which is also confirmed in the first hypothesis. In the second part, with the inclusion of the variable of nomophobia, the value of Sig was less than 0.01, as a result of which the null hypothesis that there is no relationship between these two variables with respect to the variable of nomophobia was rejected and the claim of the researcher about the relationship between the two variables of addiction. It is confirmed to virtual space and quality of life with emphasis on nomophobia.

Table 5: Hierarchical linear regression to determine the relationship between cyberspace addiction and quality of life with nomophobia

| Model | T | Partial correlation coefficient | Non-standard coefficients | | The significance level |
|-------------------------|--------|---------------------------------|---------------------------|--------|------------------------|
| | | Beta | Std. Error | B | |
| constant number | 44.53 | - | 2.89 | 129.07 | 0.01 |
| Addiction to cyberspace | -7.66 | -0.39 | 0.048 | -0.36 | 0.01 |
| constant number | 38.84 | | 3.33 | 129.47 | 0/01 |
| Addiction to cyberspace | -6.39 | -0.39 | 0.056 | -0.36 | 0.01 |
| Nomophobi a | -0.242 | -0.01 | 0.040 | -0.01 | 0.80 |

Discussion and conclusion:

The results obtained from the data of the first hypothesis of the research showed that there is a negative and significant relationship between cyberspace addiction and quality of life at the rate of 0.38, and it indicates that as the level of cyberspace addiction increases in people, their quality of life increases. The findings of the studies of Tonkmani et al. (8), Doleh et al. (11), Gol Mohammadian et al.(18), Lee et al. In explanation, it can be said that the concept of internet addiction and consequently the mobile virtual space as a real clinical disorder in need of treatment is an accepted thing in different societies, which is for several scientific fields such as communication sciences, psychology,

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psychiatry and sciences. It shows very important nerves. Because this problem is a kind of destructive mental preoccupation that ultimately causes damage or helplessness in various areas of the individual's life, which the ability to control is small in people. This opinion is based on Shiki et al.'s study that more addiction to The Internet has increased the indicators of impulse control disorder among students (20). Based on this, the researcher's opinion is that the excessive use of mobile internet, in addition to the isolation of humans in the boundless virtual space, also reduces the productivity and work efficiency of users. In this context, the findings of Zhong et al. (2016) show that the most common physical complaints in using the Internet are dry eyes, vision loss, cervical pain, obesity, back pain, neck pain, hearing problems, and lack of physical activity.

More than the Internet is strongly associated with an increase in physical complaints, causing a decrease in the productivity and work efficiency of users. In addition, existing studies have shown that the relationship between Internet addiction and both depressive symptoms and physical health is bidirectional (21). In examining the second hypothesis, the research findings showed that there is a positive and significant relationship between cyberspace addiction and nomobile phobia. The studies of Mousavi and Shafiq (22), Askari et al. (10), Azadmanesh et al. (23) are in line with the results of the second hypothesis. In explaining the results of the second hypothesis based on the use and satisfaction theory (UGT), the audience, more or less actively, they are looking for the content that gives them the most satisfaction. The level of this satisfaction depends on the needs and interests of the individual. The needs are based on four models of awareness and monitoring (people use the media in order to obtain news and information from the surrounding world and monitor their social environment); Personal relationships (people consider the media as their companions in the process of communication and use media content to communicate and talk with others); personal identity (people use the media to gain self-awareness, find behavioral patterns and strengthening personal values) and entertainment and escape from reality (people use the media to have fun and escape from the problems of daily life and emotional discharge)(24). Based on this, audiences who have a sense of satisfaction and satisfaction in using the media find more desire to use it. The more satisfaction, the amount of presence in the virtual space and consequently the amount of addiction increases. Therefore, the fear of any obstacle that will take him away from this media pleasure, creates indescribable worry in him, whose physical results are anxiety, respiratory changes, tremors, sweating, anxiety, and irregular heart function (22). One of these fears is the possible possibility of not having a mobile phone or the possible possibility of any defect in the functioning of this communication device. The restless psyche caused by this stress and anxiety ultimately leads to the disease of nomobile phone phobia. Cognitive Avoidance Theory Borkovec and colleagues also confirm the explanation that the cause of worry is a chain of uncontrollable negative thoughts and images to solve mental problems about real or imaginary issues. Therefore, worry has a close relationship with the fear process; Fear that focuses on avoiding future problems and thus acts as a response to potential threats (25).

The results of the third hypothesis show that there is a moderate negative relationship between quality of life variables and nomophobia. Among the components of quality of life, the "mental health" component had a significant relationship with nomophobia to a higher extent than "physical health". The findings of this hypothesis are consistent with the research of Azadmanesh et al. (23) and Dixit et al. (26). In explaining the alignment of the results, Von Gunter Burkart's theory is referred to in the Indian book *Mania or Mobile Phone Madness*. He refers to mania as extreme madness and infatuation, and the main axis of his discourse in this regard is based on the fact that the relationship of parts of the society with the mobile phone has become a crazy and addictive relationship. The main focus of this theory says: "The behavior and relationships of humans underwent changes and transformations under the influence of new communication techniques. A clear example of this is the transformation in the border between the public and private spheres of people; that everyone is willingly or unwillingly exposed to eavesdropping on other people's mobile conversations. Günther believes that mobile phones have created a "constant alert" for humans. This sense of constant alertness in mobile phone owners has created a kind of intoxication and confusion caused by need and dependence (addiction) in people, which has affected the person's life and its quality (27). But Wellman's study is not in line with the results of this research. He believes that: Some people fear that the Internet has alienated people from each other, but the results of our research prove the opposite. 60% Adults believe that the modern technology of mobile phones and the Internet has not caused the breakup of their families. 25% admit that mobile phones and online communication have brought family members closer together. In the meantime, 11% have considered the negative impact of new communication technologies on their family relationships. Wellman believes that families are happy with the attractions of technology, because by using these facilities, they can easily access each other during the day and can be informed of each other's actions. In other words, new technologies have made the lack of physical presence of family members together not lead to breaking of their emotional and emotional relationships (28). The values obtained from the fourth hypothesis confirm the researcher's claim based on the relationship between the two variables of cyberspace addiction and quality of life with nomophobia. According to the above related hypotheses that the relationship between cyberspace addiction and quality of life, cyberspace addiction and Nomophobia and quality of life and nomophobia have been declared significant, strong or moderate, it is natural that all the theories and studies mentioned above also apply here. The researcher's opinion is that people who establish their communication through mobile phones and enter the world of virtual networks through the Internet, despite the fact that they meet some of their personal and social needs and in this way lead their lives with quality. they manage higher; if the amount of use and presence in this arena exceeds the necessary limit, in fact, they have entered an unreal media world, not the real world. We live in a world: the real world and the media world; if our media literacy is low, we may not be able to recognize the border between these two worlds. That is, sometimes we mistakenly think that what we see in the media world is a window to the real world. Sometimes, at the same time, that the media is exactly a window to the world of reality, we must tell ourselves: "These are just the words of the media and the real world is a different form. Media literacy can save us from these traps" (29).

In the general conclusion of the hypotheses of the present research, the researcher emphasizes that the media literacy of all people who have the means to use the media space should be improved to the optimum level so that they know the extent and limits of using each media, which leads to an increase in interest. to improve the quality of his life and to know how to improve and use his resistance against its charms.

Research proposals:

- According to the results of the first hypothesis that cyberspace addiction affects the quality of people's lives, it is suggested that experts in the fields of communication and technologies related to communication sciences, medical sciences and psychology by appearing in radio and television programs and also In the virtual space, introduce the useful and harmful uses of various media, especially mobile phones, to their audience so that users know how and to what extent the use of a communication tool is expected. and not have an adverse effect on the quality of his life. And this is not possible except by moving in a slow way to become a popular culture.

-According to the second hypothesis, which considers cyberspace addiction to be related to mobile phobia, it is suggested that relevant decision-making authorities should make arrangements to teach users a level of media literacy during various workshops and remember that Media literacy is not just about distinguishing between good and bad in media content, but knowing what communication tool, when and how much to use so that they don't get attached and destructively dependent on the media, especially mobile phones, which lead to diseases be numerous.

-In accordance with the third hypothesis, which considers the quality of life to be influenced by nomophobia, considering that more of the country's young people use mobile phones, which bring them risks such as the fear of not having this means of communication, it is suggested that dear parents give them a chance. Offers. to spend more time with their children so that the emotional vacuum that draws young people to the attractions of this communication medium will decrease.

-In the end and in accordance with the fourth hypothesis which considers the addiction to virtual space and the nomophobia resulting from this permanent connection to be effective in reducing the quality of life of users, it is suggested that cultural and propaganda centers should be established in view of the influence of young people on artists and athletes under the title of celebrity. Especially the country's radio and television, by designing and preparing short educational programs in the language of these people, warn them of the dangers lurking in mobile phones, so that eventually we have a young, enthusiastic and thoughtful generation that will take the future of the country in their hands.

Research limitations

- 1 .The inability to control all the effective variables in the research situation
2. Limiting the means of collecting and measuring information to questionnaires
3. The possibility of the subjects' perception of the concepts of the questionnaire and answering it

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Conflict of interest

The author(s) of the article declare that in relation to the publication of the presented article, they have completely avoided publishing ethics, including plagiarism, misconduct, falsification of data, or

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