Original Article

Examining the relationship between internet addiction and social safeness and pleasure level in nursing students

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Abstract

Objectives: The aim of this study is to examine the relationship between internet addiction and social safeness and pleasure level in nursing students.

Methods: This study was design as a descriptive-cross-sectional and correlational study. The study was carried out in a state university nursing department between March 01, 2022, and June 10, 2022. The population of the study consists of nursing students (n=979). The sample consisted of 563 students. "Personal Information Form," "Young's Internet Addiction Test-Short Form (YIAT-SF)" and "Social Safety and Pleasure Scale" were used to collect the data.

Results: In the present study, it was found that the students' YIAT-SF mean score was 27.47±8.99, and their Social Safeness and Pleasure Scale mean score was 30.17±8.43. Those who were 2nd-year students, had an average internet usage time of 5–9 h and more than 10 h, did not have a personal computer, and considered the time they spent on the internet more had higher internet addiction levels, and lower social safeness and pleasure levels; on the other hand, those who were younger than 20 years old, were staying in dormitories and houses with their friends, and evaluated their income status as moderate or low, had lower social safeness and pleasure levels; on the other hand, the level of internet addiction was higher for men and those living with their families.

Conclusion: A negative significant correlation was found between internet addiction and social safeness and pleasure. As internet addiction increased, the level of social safeness and pleasure decreased.

Keywords: Internet addiction; nursing students; social safeness and pleasure.

The internet, which has become an important part of our lives, is widely used at the global level. The rapid development of information technologies brings about changes in individuals and therefore in society.

The "Global Digital Analysis" report states that 72% of Türkiye are active internet users. Türkiye ranks 14th in internet growth rate.[1] Moreover, it is stated in the study by TSI that the prevalence of internet addiction varies between 0.3% and 38%.[2]

The internet has brought up internet addiction, which is an ever-growing public health problem in many areas of modern life regardless of age, gender, and culture.[3] Internet addiction is defined as the inability of the individual to control the use of the Internet and to find meaning in the time spent without the Internet, being extremely angry when he cannot access the Internet, and negatively affecting his work, interpersonal relationships, and family life.[4]

Socialization is the basis of interpersonal relations. The social and societal aspects of human beings make their interpersonal relationships meaningful. For an individual to have a meaningful life, it is very important to establish relationships based on trust. The society they live in expects individuals to establish social relations in accordance with social values and to behave in this di-

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rection. However, virtual environments can distract individuals from real emotions such as sadness, anxiety, and anger.[5,6]

Today, individuals communicate in virtual environments instead of face-to-face communication to make friends, communicate, solve their problems, share their concerns, and not be alone.[7,8] The internet, which has been widely used for communication purposes in recent years, has replaced real social activities and interpersonal relationships, and people have moved away from socializing and toward virtual social activities. However, the relationships established in the virtual environment are weaker than the relationships established in real life. Spending too much time on the Internet alienates people from their social environment, drags them into loneliness, and negatively affects their interpersonal relationships.[9,10]

To have a meaningful life, trust-based relationships and social aspects of people are important.[11] The concept of social trust, which develops as a result of people's interactions with others, starts with the individual and continues in the process of socialization. Sustaining a person's life in balance depends on trust-based interpersonal relationships. Being accepted by others, interacting with others, and being approved are basic human needs. Interpersonal communication supports the formation of positive emotions as well as personal development. The feeling of pleasure is one of these positive emotions and is associated with social trust.[12] Individuals who see themselves as socially safe have a positive affect and can control themselves. In addition, they can analyze events in detail using their advanced cognitive skills, think creatively, and solve their problems by establishing cause-effect relationships in different ways.[13] Individuals who do not feel socially safe experience difficulties in participating in social activities face-to-face by feeling blocked in their social lives. Because not being accepted and approved by others is seen as a social threat and prevents the establishment of social relations and interaction. To reduce the anxiety caused by frustration, individuals can apply to unreal virtual environments that reveal the feeling of satisfaction. It is known that these individuals use the internet and smartphone functions that facilitate access to virtual environments more frequently. In this sense, individuals who do not feel socially safe are in the risky group in terms of internet addiction.[4]

University students are in the risk group in terms of internet addiction because they tend to use technology, are away from their families, cannot plan their leisure activities properly, interpersonal relationships are important in terms of developmental period, and they use the internet more for socialization.[14] In a study conducted with university students, the prevalence of internet addiction was found to be 25.8%.[15] Among university students, internet addiction of nursing students is low to moderate but tends to increase.[16,17] University students go through a sensitive period that manifests itself with many physical, psychological, and social changes. In ad-

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What is presently known on this subject?

- The internet, which is widely used due to the development of information technology, has brought up internet addiction, which is an ever-growing public health problem in many areas of modern life, regardless of age, gender, and culture. In this regard, university students are in the risky group in terms of internet addiction due to their developmental characteristics and the fact that they live away from their families and they are unable to plan their leisure activities correctly.

What does this article add to the existing knowledge?

- Internet addiction of nursing students is moderate. It has been found that internet addiction is correlated with social security and satisfaction; as internet addiction increases, feeling of social safeness and pleasure decreases.

What are the implications for practice?

- The results of this study show the importance of fighting against internet addiction in nursing students. Fight against internet addiction will prevent students at risk from developing addiction and contribute to their social safeness and pleasure.

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dition, as they begin to gain independence on their feelings, thoughts, and behaviors during this period, their relationship patterns with their peers, families, and others change. The change in interpersonal relationship patterns prevents students from feeling socially safe and causes them to think that they are not accepted and approved, and to apply to virtual environments to alleviate their anxiety.[14,18]

Nursing students, as a requirement of the profession, first need to acquire healthy lifestyle behaviors to protect and promote health. In this sense, it is important for nursing students, who will lead society to gain healthy life behaviors, to be a role model in life behaviors such as social safeness and pleasure and internet addiction.[19] Moreover, the importance of the subject is clear when considering that the physical, emotional, and social problems that occur with internet addiction can negatively affect the personal, social, and academic lives of nursing students and clinical practice performances and cause wrong nursing practices. No study has been found in the literature examining the relationship between internet addiction and social safeness and pleasure in nursing students. In line with all these data, this study aimed to examine the relationship between internet addiction and the level of social security and satisfaction in nursing students.

Research Questions

1. What is the internet addiction level of nursing students?

2. What are the social safeness and pleasure levels of nursing students?

3. Is there a significant correlation between internet addiction and sociodemographic characteristics of nursing students?

4. Is there any significant correlation between nursing students' social safeness and pleasure and their socio-demographic characteristics?

5. Is there any significant correlation between internet addiction and social safeness and pleasure levels of nursing students?

Materials and Method

Type of the Study

This study was designed as a "descriptive-cross-sectional and correlational study."

Dependent Variables of the Study

Internet addiction means scores of nursing students.

Independent Variables of the Study

Sociodemographic characteristics of nursing students such as age, gender, and social safeness and pleasure mean scores.

Location and Time of the Study

The study was carried out in the nursing department of a state hospital between March 01, 2022, and June 10, 2022 covering the spring semester of the 2021–2022 academic year.

Population and Sample of the Sample

The population of the study consisted of students attending nursing department of a state university (n=979). Convenience sampling method, one of the improbable sampling methods, was used to determine the sample size. Accordingly, the sample was determined as 550 with the formula (n=N. t2.p.q/d2 (N-1)+t2.p.q) by accepting the prevalence of internet addiction as 25.8%.[15] The sample of the study consisted of voluntary students who met the inclusion criteria and agreed to participate in the study. The inclusion criteria of the study were determined as "being voluntary to participate in the study and being 18 years old and older. The exclusion criteria were determined as being a foreign national and having restriction in reading and understanding Turkish."

Procedure

"Personal Information Form," prepared by the researchers, "Young's Internet Addiction Test-Short Form (YIAT-SF)" and "Social Safeness and Pleasure Scale (SSPS)" were used to collect the data. Data collection tools were transferred to an online environment via "Google Forms." The data were collected by sending the prepared "Google Forms" link to the e-mail addresses and WhatsApp groups of the students. Before the interview, informed consent was obtained from the students through "Google Forms." It took average of 10–15 min to complete the data collection tools.

Data Collection Tools

Personal Information Form

It was prepared by the researchers and consists of 11 questions about sociodemographic characteristics.

YIAT-SF

The scale developed by Young was converted into a short form by Pawlikowski et al.,[20] (2013). Turkish validity and reliability of the scale was conducted by Kutlu et al.,[21] (2016). YIAT-SF is a one-dimensional 5-point Likert-type (5=very often; 1=never) scale consisting of 12 items. The total score ranges between 12 and 60 points. Higher scores signify that the level of internet addiction increases. There is no reverse-scored item in the scale. Cronbach's alpha coefficient of the scale was found to be 0.91.[21] In the present study, the Cronbach's alpha coefficient was found to be 0.91.

SSPS

The Turkish validity and reliability study of the scale developed by Gilbert (2009)[12] was conducted by Akın et al.,[11] (2013). The scale consists of 11 items and one dimension. SSPS has a 5-point Likert-type rating (0=Never; 4=Always). The scale gives a total score. The total score ranges between 0 and 44 points. Higher scores signify that the level of social safeness and pleasure increases. There is no reverse-scored item in the scale. Cronbach's alpha coefficient of the scale was found as 0.82.[11] In the present study, Cronbach's alpha coefficient was found to be 0.92.

Data Analysis

Statistical analyses were performed using SPSS Statistics 24 software. For sociodemographic characteristics, descriptive statistics such as number, percentage, mean and standard deviation were used. For normally distributed data, the "Independent Sample-t" test was used to compare two independent groups and the "Analysis of variance" test was used to compare three or more independent groups. For non-normally distributed data, the "Mann–Whitney U" test was used to compare two independent groups and the "Kruskal–Wallis H" test was used to compare three or more independent groups. Bonferroni correction was applied for pairwise comparisons of significantly different variables. "Spearman" correlation coefficient was used to examine the relationships between the scales. Statistical significance was accepted as p<0.05.

Ethical Considerations

Approval from the university ethics committee (Research Code No: 2022-152 Date: 11/01/2022) and written permission from the relevant unit of the university where the study would be conducted were obtained to conduct the research. Before starting the application, the students were informed about the purpose of the study and the process and that they could withdraw from the study at any time before, during, and after the application. Informed consent was obtained from the students who will participate in the study after they were informed with necessary explanations

Table 1. Sociodemographic characteristics of the students (n=563)					
Variable	n	%	Variable	n	%
Age (mean±SD) (years)		20.81±1.68	Average internet use time (mean±SD) (h)		
<20	120	21.3	≥10 h	39	6.9
20–22	371	659	Most frequent internet use time		
≥23	72	12.8	Night	244	43.3
Gender			Day	319	56.7
Female	485	86.1	Having a personal computer		
Male	78	13.9	Yes	359	63.8
University year			No	204	36.2
1st year	114	20.2	The most used technological tool		
2nd year	171	30.4	Mobile phone	552	98.0
3rd year	121	21.5	Computer	11	2.0
4th year	157	27.9	Purpose for internet use		
Place of residence			Communication	428	76.0
Dormitory	334	59.3	Entertainment/music	426	75.7
House with friends	46	8.2	Social media	435	77.3
With family	183	32.5	Playing games	101	17.9
Income status			Daily news	178	31.6
High	32	5.7	Shopping	211	37.5
Moderate	444	78.8	Evaluating time spent on the internet		
Low	87	15.5	Less	12	2.1
Average internet use time (mean±SD) (h)		5.49±2.19	Acceptable	359	63.8
<5 h	202	35.9	More	192	34.1
5–9 h	322	57.2	Total	563	100

SD: Standard deviation.

about the purpose of the study, the method of application, the process, and the planned results. The study was conducted in accordance with the Declaration of Helsinki.

Results

Table 1 shows the sociodemographic characteristics of the students. The mean age of the students was 20.81±1.68 (years) and 371 (65.9%) of them were aged between 20 and 22 years. It was determined that 485 participants (86.1%) were female, 171 (30.4%) were the 2nd-year students, 334 (59.3%) were residing in dormitories, and 444 people (78.8%) evaluated their income status as moderate. It was determined that 322 (57.2%) used the internet for 5–9 h a day and 319 (56.7%) used the internet most frequently during the day. 359 participants (63.8%) had a personal computer, 552 (98.0%) used mobile phones most frequently to use the internet, 435 (77.3%) of them used social media for the purpose of internet use, and 359 (63.8%) considered that they spent time on the Internet at an acceptable level.

Table 2 shows the scale mean scores of the students according to their socio-demographic characteristics. While their YIAT-SF mean score was 27.47±8.99, their SSPS mean score was 30.17±8.43. A statistically significant difference was de-

termined in terms of SSPS scores according to age (χ^2=19.485; p=0.000). As a result of pairwise comparisons with Bonferroni correction made to determine from which group the significant difference originated, a significant difference was found between those in the age group of <20 and those in the age groups of 20–22 and ≥23 years. Those in the age group of <20 have significantly lower SSPS scores than those in the age groups of 20–22 and ≥23. Likewise, a significant difference was found between those in the age group of 20–22 years and those in the age group of ≥23 years. Those in the age group of 20–22 years had significantly lower SSPS scores than those in the age group of ≥23 years.

A statistically significant difference was found in terms of YIAT-SF scores according to gender (Z=-3.484; p=0.000). YIAT-SF scores of the male participants were significantly higher than the scores of their female participants (Table 2).

A statistically significant difference was found in terms of YIAT-SF scores according to university year (χ^2=16.622; p=0.000). As a result of pairwise comparisons with Bonferroni correction made to determine from which group the significant difference originated, it was determined that there was a significant difference between the 2nd-year students and the 1st-, 3rd-, and 4th-year students. The 2nd-year students' YIAT-SF

Table 2. YIAT-SF and SSPS scores according to socio-demographic characteristics

Scale variable		Young's internet addiction		Social safeness and pleasure	
	n	Mean±SD	Median (IQR)	Mean±SD	Median (IQR)
Age					
<20[1]	120	28.24±8.79	26.0 (13.0)	28.10±7.71	28.0 (10.0)
20–22[2]	371	27.26±8.57	26.0 (12.0)	30.28±8.39	31.0 (11.0)
≥23[3]	72	27.26±11.26	25.0 (15.8)	33.06±8.99	33.5 (11.5)
Statistical analysis*		χ^2=2.138		χ^2=19.485	
Probability		p=0.343		p=0.000	
Difference				(1–2.3) (2–3)	
Gender					
Female	485	26.88±8.57	25.0 (11.0)	30.24±8.32	31.0 (11.0)
Male	78	31.14±10.60	30.0 (14.3)	29.71±9.16	31.5 (13.0)
Statistical analysis		Z=-3.484		Z=-0.271	
Probability		p=0.000		p=0.787	
University year					
1st year[1]	114	26.69±8.36	25.0 (11.5)	28.96±7.81	28.0 (10.3)
2nd year[2]	171	29.85±9.61	28.0 (14.0)	28.24±8.09	29.0 (10.0)
3rd year[3]	121	26.79±8.39	26.0 (12.0)	30.91±8.64	32.0 (13.0)
4th year[4]	157	25.98±8.76	25.0 (11.0)	32.57±8.48	33.0 (11.0)
Statistical analysis		χ^2=16.622		χ^2=30.221	
Probability		p=0.001		p=0.000	
Difference		(2–1.3.4)		(1–3.4) (2–3.4)	
Place of residence					
Dormitory[1]	334	27.13±8.75	26.0 (12.3)	30.39±7.61	31.0 (10.0)
House with friends[2]	46	25.57±10.07	23.0 (11.0)	34.54±7.78	35.5 (9.0)
With family[3]	183	28.56±9.06	27.0 (13.0)	28.67±9.56	30.0 (14.0)
Statistical analysis		χ^2=7.404		χ^2=17.318	
Probability		p=0.025		p=0.000	
Difference		(2–3)		(2–1.3)	
Income status					
High[1]	32	24.66±7.85	23.5 (7.5)	34.47±9.56	35.5 (11.3)
Moderate[2]	444	27.54±8.97	26.0 (13.0)	30.12±8.13	31.0 (11.8)
Low[3]	87	28.14±9.42	28.0 (14.0)	28.84±9.09	29.0 (11.0)
Statistical analysis probability difference		χ^2=4.060 p=0.131		χ^2=13.501 p=0.001 (1–2.3)	
Average internet Use time					
<5 h[1]	202	24.47±7.52	23.0 (8.0)	31.56±8.07	33.0 (9.0)
5–9 h[2]	322	28.78±9.06	27.0 (13.0)	29.62±8.48	30.0 (11.0)
≥10 h[3]	39	32.21±10.89	35.0 (17.0)	27.46±8.96	28.0 (11.0)
Statistical analysis		χ^2=40.118		χ^2=13.801	
Probability		p=0.000		p=0.001	
Difference		(1–2.3)		(1–2.3)	
Most frequent internet Use time					
Night	244	27.62±9.08	26.0 (13.0)	30.39±8.30	31.0 (11.0)
Day	319	27.35±8.94	26.0 (13.0)	30.00±8.54	31.0 (12.0)
Statistical analysis		Z=-0.263		Z=-0.397	
Probability		p=0.792		p=0.691	

Table 2. Cont.

Scale variable		Young's internet addiction		Social safeness and pleasure	
	n	Mean±SD	Median (IQR)	Mean±SD	Median (IQR)
Having a personal computer					
Yes	359	26.85±8.69	25.0 (11.0)	30.68±8.57	32.0 (12.0)
No	204	28.56±9.42	27.5 (14.0)	29.27±8.12	30.0 (11.0)
Statistical analysis		Z=-2.268		Z=-2.413	
Probability		p=0.023		p=0.016	
The most used					
Technological tool					
Mobile phone	552	27.54±9.03	26.0 (13.0)	30.13±8.45	31.0 (12.0)
Computer	11	24.00±6.86	23.0 (5.0)	31.91±7.11	33.0 (12.0)
Statistical analysis		Z=-1.328		Z=-0.742	
Probability		p=0.184		p=0.458	
Evaluating time spent on the internet					
Less[1]	12	25.17±9.18	22.5 (11.3)	32.75±4.90	33.0 (6.3)
Acceptable[2]	359	24.66±7.46	24.0 (10.0)	31.07±8.23	32.0 (11.0)
More[3]	192	32.86±9.18	33.0 (11.0)	28.32±8.69	29.0 (10.8)
Statistical analysis		χ^2=108.025		χ^2=15.533	
Probability		p=0.000		p=0.000	
Difference		(1.2–3)		(1.2–3)	
Total		27.47±8.99 26.0 (12.60)		30.17±8.43 31.0 (0.44)	

*: "In non-normally distributed data, Mann–Whitney U" test (Z-table value) statistics for comparison of measurement values of two independent groups and "Kruskall–Wallis H" test (χ^2-table value) statistics were used for comparison of three or more independent groups. Numbers 1, 2, and 3 show which groups the difference results from. YIAT-SF: Young's internet addiction test-short form; SSPS: Social safeness and pleasure scale; SD: Standard deviation; IQR: Interquartile range.

scores were significantly higher than YIAT-SF scores of 1st-, 3rd-, and 4th-year students (Table 2). A statistically significant difference was found between SSPS scores in terms of university year (χ^2=30.221; p=0.000). As a result of pairwise comparisons with Bonferroni correction made to determine from which group the significant difference originated, a significant difference was found between the 1st-year students and the 3rd- and 4th-year students. The SSPS scores of the 1st-year students were significantly lower than the 3rd and 4th-year students. Likewise, a significant difference was found between the 2nd-year students and the 3rd and 4th-year students. The SSPS scores of the 2nd-year students were significantly lower than the scores of the 3rd- and 4th-year students (Table 2).

A statistically significant difference was found in terms of YIAT-SF scores according to the place of residence (χ^2=7.404; p=0.025). As a result of pairwise comparisons with Bonferroni correction made to determine from which group the significant difference originated, a significant difference was found between those who stayed in houses with their friends and those who stayed with their families. The YIAT-SF scores of those who were living with their families were significantly higher than those who were living in houses with

their friends. A statistically significant difference was found in terms of SSPS scores according to the place of residence (χ^2=17.318; p=0.000). As a result of pairwise comparisons with Bonferroni correction made to determine from which group the significant difference originated, a significant difference was found between those living in the houses with their friends and those living in the dormitory and with their families. SSPS scores of those living in the dormitory and with their families were significantly lower than the scores of those living in the houses with their friends (Table 2).

A statistically significant difference was found between SSPS scores in terms of income status (χ^2=13.501; p=0.001). As a result of pairwise comparisons with Bonferroni correction made to determine from which group the significant difference originated, a significant difference was found between those with high-income status and those with moderate and low-income status. Those who considered their income status as moderate or low had significantly lower SSPS scores than those who considered their income status as high (Table 2).

A statistically significant difference was found between YIAT-SF scores in terms of average internet use time (χ^2=40.118; p=0.000). As a result of pairwise comparisons with Bonferroni

correction made to determine from which group the significant difference originated, a significant difference was found between those who used the Internet for <5 h and those who used the Internet for 5–9 and ≥10 h. Those who used the Internet for 5–9 and ≥10 h had significantly higher YIAT-SF scores than those who used the Internet for <5 h. A statistically significant difference was found between SSPS scores in terms of average internet use time (χ^2=13.801; p=0.001). As a result of pairwise comparisons with Bonferroni correction made to determine from which group the significant difference originated; a significant difference was found among those who used the Internet for <5 h and those using the Internet for 5–9 and ≥10 h. Those who used the internet for an average of 5–9 and ≥10 h a day had significantly lower SSPS scores compared to those using the Internet for <5 h (Table 2).

A statistically significant difference was found between YIAT-SF scores in terms of having a personal computer (Z=-2.268; p=0.023). Those who did not have a personal computer had significantly higher YIAT-SF scores than those who had a personal computer. A statistically significant difference was found between SGHM scores in terms of having a personal computer (Z=-2.413; p=0.016). Those who did not have a personal computer had significantly lower SSPS scores compared to those who had a personal computer (Table 2).

A statistically significant difference was found in terms of YIAT-SF scores according to the evaluation of the time spent on the Internet (χ^2=108.025; p=0.000). As a result of pairwise comparisons with Bonferroni correction made to determine from which group the significant difference originated, a significant difference was found between those who thought that they spent less and acceptable time on the Internet and those who considered that they spent more time on the Internet. YIAT-SF scores of those who considered the time spent on the Internet as more were significantly higher than those who considered the time spent on the Internet as less and acceptable. A statistically significant difference was found in terms of SSPS scores in terms of the evaluation of the time spent on the Internet (χ^2=15.533; p=0.000). As a result of pairwise comparisons with Bonferroni correction made to determine from which group the significant difference originated; a significant difference was found between those who considered the time they spent on the internet as less and acceptable and those who considered that they spent more time on the internet. Those who considered their time on the Internet as more had significantly lower SSPS scores than those who considered their time on the Internet as low and acceptable (Table 2).

Table 3 shows the correlation between the scales. A negative, weak, and statistically significant correlation was found between YIAT-SF and SSPS scores (r=-0.341; p=0.000). As YIAT-SF scores increased, SSPS scores decreased. Similarly, as YIAT-SF scores decreased, SSPS scores increased.

Table 3. The correlation between YIAT-SF and SSPS

Correlation*		Young's internet addiction test
Social safeness and pleasure scale	R	-0.341
	p	0.000

*: In cases where at least one of the two quantitative variables is not normally distributed, the "Spearman" correlation coefficient was used. YIAT-SF: Young's internet addiction test-short form; SSPS: Social safeness and pleasure scale.

Discussion

The aim of this study is to examine the relationship between internet addiction and social safeness and pleasure level in nursing students. Mean scores of the students were found to be 27.47±8.99 for YIAT-SF and 30.17±8.43 for SSPS. They had a moderate level of internet addiction. The age group with the most internet use in Turkish society is 16–24 years. [2] In the literature, there are studies in which nursing students have low and moderate levels of internet addiction. [17,22–25] High level of internet addiction was detected in 1.2% of students in the study by Erbil et al.[17] (2017) and 0.2% of the students in the study by Günay et al.[25] (2018). On the other hand, another study reported that 16.8% of the students were potential internet addicts.[26] In a study conducted with nursing students, it was found that pathological internet use was 3.8% and 29.1% had a risk of addiction.[27] It was observed that the students had a medium-high level of social safeness and pleasure. It is thought that students can control themselves with positive affect and adapt to changes in cognitive sense, in other words, they can see cause-effect relationships related to events from different perspectives.[13]

In the present study, it was found that the social safeness and pleasure levels of those aged <20 years were lower than those in the age groups of 20–22 and ≥23 years; on the other hand, those in the age group of 20–22 years had lower levels compared to those in the age group of ≥23 years. In other words, as the age decreased, the social safeness and pleasure decreased. The difficulties brought by the developmental period characteristics of the students who have just started university as well as the interpersonal relations and emotional problems suggest that the environment of uncertainty affects the process of adapting to a new social environment, and they do not feel socially safe.

It was found that male participants had higher level of internet addiction than their female counterparts. Kabakli Çimen (2018),[28] Kırağ et al.,[23] (2016), and Durkee (2012)[29] found in their studies that male students' internet addiction levels were higher than female students. Özdemir et al.,[7] (2014) determined that male university students made more online/virtual sharing. In Turkish society, 70.5% of men are internet

users; whereas, 51.9% of women are internet users.[2] However, there are study results in the literature reporting that gender is correlated with internet addiction,[24,30,31] as well as the study results reporting no correlation.[17,32] The reason for the difference between the genders in the present study may be that girls prefer face-to-face communication more. Women are more supported in establishing and maintaining interpersonal relationships. The greater orientation of women in establishing and maintaining interpersonal relationships may have allowed them to spend more time in real social settings. Moreover, the fact that men are more interested in technology due to their gender roles and women's negative attitudes towards technology may have revealed this result.[33]

It was found that the level of internet addiction of the 2nd-year students was higher. In the studies conducted by Dost et al.,[30] (2021) and Erbil et al.,[17] (2020) with nursing students, no correlation was found between university year and internet addiction. This might have stemmed from the fact that students trying to adapt to university life have difficulties during this process and tend to virtual environments as a coping method.

In the present study, those living with their families had a higher level of internet addiction and a lower level of social safeness and pleasure than those living in houses with their friends. Unlike the present study, studies have found no correlation between internet addiction and place of residence.[17,34] The convenience of those living with their families in terms of access to the Internet may have increased the addiction by causing an increase in the time spent on the Internet. Considering that students living in the houses with their friends and dormitory have limited access to the Internet with their own means, this result is expected. In addition, the fact that students living with their families cannot socialize independently in an environment that belongs to them suggests that they do not feel socially safe and are not satisfied with this situation. It is known that spending too much time on the Internet leads people to feel loneliness and alienates individuals from their social environment.[9] In this sense, the two findings in the present study support each other together with the literature.

Those who considered their income situation as moderate or low had lower levels of social safeness and pleasure. In Maslow's (1943)[34] hierarchy of basic needs, there is a need for safety after physiological needs. The fact that the individual can exist in a healthy social life without feeling danger in peace seems to be associated with the economic situation. It makes us think that the current economic situation affects the living standards and social environment of people, revealing this finding.

In the present study, it was found that the average daily internet use time was 5.49±2.19 h. Internet addiction of those who used the Internet for 5–9 and ≥10 h on average was higher than those who used the Internet for <5 h and their social safeness and pleasure levels were lower. As the duration of internet use increased, the level of internet addiction increased; whereas, the social safeness and pleasure decreased. Internet use time is a primary factor for addiction.[35,36] In their study, Erbil et al.,[17] (2020), on the other hand, found that students who used the internet for 5 h or more a day had higher levels of internet addiction. In the study conducted by Dost et al.,[30] (2021), with nursing students, they determined that 39% of the students used the Internet for an average of 3–5 h/day. Again, similar to the findings of the present study, a previous study reported that the average internet use time of students with problematic internet use was 3–5 h.[37] The different results showing the correlation between internet use time and addiction can be associated with the different research designs, addiction definition criteria, and the applied assessment tools and differences in the culture applied. Moreover, another study reported that those who used the Internet for more than 2 h on average a day had high internet addiction and experienced negativities in their social relationships.[29] It is known that the internet, which is an important tool today, replaces the activities carried out in real life and individuals tend to virtual social activities. Virtual environments become convenient for those who feel lonely in real social life. However, the increase in the use of the internet by individuals causes them to move away from society, have weakened social relations, and communicate with family and friends less.[6] Individuals who are not satisfied and peaceful with their lives and cannot provide emotional satisfaction experience a sense of threat instead of a sense of security.[38] It is thought that these individuals, who do not feel socially safe and have pleasure, tend to more virtual environments to meet their needs and increase their internet usage time.

While internet addiction was higher among those who did not have a personal computer, social safeness, and pleasure levels were lower. In the present study, 63.8% of the students had a personal computer. In their study, Koç and Buzlu (2022)[38] examined problematic internet use with nursing students and determined that most of the students had a computer and internet and they had a computer in their room/laptop. Today, however, it is known that smartphones are an integral part of life and are frequently used to connect to the internet.[39,40] In recent years, it can be asserted that smartphones have replaced personal computers. It is thought that this result of the present study is associated with the fact that students frequently connect to the internet with their smartphones. Social media use, communication, and online games are the most common actions performed with a smartphone. In addition, the fact that the aim of using the internet by the students in the present study was social media with a rate of 77.3% showed that the students used the smartphone to connect to the internet.

While those who considered the time spent on the Internet as excessive had higher level of internet addiction, their social safeness and pleasure levels were lower. In their study, Dost et al.,[30] (2021) found no significant correlation between students' evaluation of internet addiction and internet addiction. Again in the same study, it was determined that the majority of the students used the internet for 3–5 h a day on average. Despite the different results in the literature regarding the correlation between internet use time and addiction, it is known that the time spent on the internet poses a risk in terms of addiction.[41] In the present study, the average daily internet use time was found to be 5.49±2.19 h. The increase in the time spent on the Internet directs individuals away from reality and toward virtual socialization.[41] In this context, the weaker ties established in interpersonal relationships in virtual life may have prevented the students participating in the present study from feeling socially safe.

In the present study, a significant correlation was found between internet addiction and social safeness and pleasure. As internet addiction increased, social safeness and pleasure decreased. Today, individuals prefer communication in virtual environments instead of face-to-face communication to solve their problems, express their feelings, and meet their needs. Although virtual environments are environments where individuals draw their own boundaries, they are environments that create uneasiness and threat. Because the bonds established in the virtual environment are far from reality and weak. Individuals use the internet to socialize and get rid of loneliness; however, after a while, it causes individuals to break away from real life and become even more lonely with social isolation. Feeling socially safe means perceiving social life as safe, calm, and peaceful, together with being approved by others. Individuals who do not feel socially safe apply to virtual social environments to cope with this situation and to get rid of loneliness. However, as the time spent on the Internet increased, individuals do not feel socially safe as they move away from the society they belong to and their social interactions weaken.[9,42] The people who use the internet the most in Türkiye are the age group of 16–24[2] and university students are also included in this group. It is known that internet addiction is more common in university students who can easily adapt to the developing technology and spend most of their daily life using the internet and interpersonal relationships deteriorate.[24] As a result, it seems likely that students who develop internet addiction do not evaluate their social lives as safe.

The limitations of the study are that this study cannot be generalized because it is limited to the answers given by the students and that it was conducted in a single institution.

Conclusion

In the present study, internet addiction of nursing students was found to be moderate. In addition, as internet addiction increased, social safeness and pleasure decreased. In line with these results, it is recommended that university students who have easy access to the internet and have a high risk of addiction should be informed and trained to use the internet in accordance with their purposes. Moreover, students can be counseled by their academic advisors in the management of leisure activities. Within the scope of the fight against addiction, psychoeducational groups and social interaction groups in which cognitive behavioral approach is used can be formed for students with internet addiction.[42] To increase the generalizability of the results of the study, studies can be conducted in different sample groups (especially before university). In addition, studies using qualitative research designs can be conducted to examine individuals' experiences related to internet addiction.

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