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# Investigation of the Relationships between Internet Addiction, Social Anxiety and Happiness in Adolescents (Arnavutkoy Case)

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#### **Article Info** ABSTRACT **Objective**: The aim of this study is to examine the relationships between internet addiction, **Article type:** social anxiety and happiness in adolescents. Research Article **Methods**: In the study, the determination of the relationships between internet addiction, social anxiety and happiness was carried out according to the relational screening model, **Article history:** which is a subtype of the general screening model. The data was collected from a total of Received 04 Apr. 2024 1170 students, 683 girls and 487 boys, studying in Arnavutköy district in the 2023-2024 Received in revised form 27 Nov. 2024 academic year. Accepted 13 Dec. 2024 **Results**: According to the findings of the research; There is a positive $(0.01 \le .314)$ Published online 01 Mar. 2025 moderately significant relationship between internet addiction and social anxiety, a negative (0.01 <= -.394) moderately significant relationship between internet addiction and happiness, and a negative (0.01<= -.394) moderately significant relationship between social anxiety and **Keywords**: happiness. 0.01 <= -,350) was found to be a moderately significant relationship. Internet addiction, Conclusions: In addition, when compared by gender, female students' happiness averages Social anxiety, and social anxiety averages were significantly higher than male students; It was observed that Adolescent, the internet addiction averages were higher for boys than for girls.

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## Introduction

While the spread of the Internet all over the world since the 1980s has created revolutionary effects in areas such as culture, commerce and technology, the number of users in daily life has increased day by day (Mishar, 2022). According to the We Are Social 2023 report, the internet usage rate in Turkey was found to be 83.4%, while the internet access rate via smartphone was found to be 95.5%. In addition, the rate of active social media use was found to be 73.1%. When we look at the world in general, according to the same report, it is seen that the rate of active internet users is 64.6%, the rate of internet access via smartphone is 68.3% and the rate of active social media users is 59.9%. The internet and social media usage rate in our country is above the world average (WAS, 2023). As the use of the internet has increased since the first day of its emergence, scientific interest in this field has also increased (Mishar, 2022). Young and Griffith were the first researchers to describe the behavioral problems that occurred in this field, as the problems that internet use created, as well as its benefits, emerged. The concepts of compulsive internet use (Black & al., 1999), problematic internet use (Davis & al., 2002), pathological internet use (Morahan, 2000) and internet addiction have been used to describe behavioral problems (Bai & al., 2001).

Internet addiction is a behavioral disorder characterized by the individual's inability to control his/her Internet use and his or her harmful use of the Internet, causing distress and impairment in daily activities. It is a concept that is more difficult to define, especially in the period when adolescents' trust in internet-based relationships increases (Tonioni, 2013). There is evidence showing that internet addiction, which is a controversial issue with no consensus on its terminology, classification and diagnosis, is inevitable in individuals' social, academic and business functionality impairments (Doğulas et al., 2008; Salicetia, 2015). Internet addiction can manifest in various forms, including addictive cybersex, cyber relationship addiction, gaming network addiction, addictive web or information overload, and computer addiction (Pezoa-Jares et al., 2012). Internet addiction is a clinical manifestation that negatively affects individuals' personal functionality as a whole, like substance addictions (Pejović-Milovančević & al., 2009). While internet addiction among adolescents is increasing at an alarming rate worldwide, it has been shown that addiction has a wide range of effects, from impairment in daily activities to deterioration of individuals' physical health (Krylov, 2023; Çakar & Eren, 2023). In addition, studies have shown that individuals with internet addiction show significantly higher pathology in

terms of social anxiety and depression than those without internet addiction (Geetha., 2023; Ko & al., 2009). Social anxiety, which is linked to internet addiction, is a common and debilitating condition that occurs with depressive symptoms in adolescents (Urban & al., 2023). Over time, the Diagnostic and Statistical Manual of Mental Disorders (DSM) has defined social anxiety as a condition that is known and has a large numerical impact (DSM, 2014). Individuals experiencing social anxiety may have problems ignoring information that they find threatening but irrelevant in areas related to daily life (Yuan & al., 2021). While the academic success of individuals experiencing social anxiety negatively affects their interpersonal relationship skills, it causes disturbing cognitive distortions in their mindset (Zahratussyafiyah, 2021). Individuals with social anxiety have an extreme fear of being negatively evaluated by others in daily life. While the main existing emotion is the fear of shame, humiliation, and rejection in social interactions, it is a cognitive disorder that occurs especially in performances in public spaces (Rose & Tadi, 2022). While social anxiety impairs quality of life, it also causes an increase in other psychopathologies (Leichsenring & Leweke, 2017). In studies conducted with adolescent students, internet addiction and social anxiety have been found to be significantly related to each other, social anxiety has a high impact on internet addiction, and social anxiety is an indicator of internet addiction symptoms (Zhao et al., 2023; Nwufo et al., 2023; Çınar Özbay & al., 2022; Mishar & al., 2022; Lyvers & al., 2022; Küçükal & Sahranç, 2022).

People respond positively or negatively to environmental stimuli. When we have a pleasant experience and feel positive emotions as a result, the mental expression of this is called "happiness" (Sundriyal & Kumar, 2014). According to another definition, happiness is satisfaction with one's life or a state of positive balance over negative emotions and situations (Goldman, 2017). Happiness has been seen as the main goal in life, and it has been stated that it can be measured by life satisfaction and subjective well-being (Veenhoven, 2011). The state of social, psychological and physiological well-being together is used to express happiness, and it has been the subject of much research in philosophical, political, economic and social fields since Ancient Greece (Sundriyal & Kumar, 2014). Happiness is also closely related to social anxiety. Happiness, one of the basic human emotions, is a universal concept and an important component of human intelligence as an indicator of an individual's personal development (Blasco-Belled et al., 2020).

Studies show that there is a moderate negative relationship between social anxiety and happiness (Unver et al., 2022; Baltacı, 2022), that social anxiety has a negative effect on happiness (Son & Kim, 2020; Demir & Kutlu, 2016), and that people with high social anxiety It has been observed that individuals who are given the task of recognizing facial expressions of individuals do not react to happiness from facial expressions (aan het Rot & al., 2022), and individuals with social anxiety have problems describing happiness in their native language compared to other individuals (Bodner & al., 2012). On the other hand, it has been found that social anxiety causes less time spent feeling positive emotions during the day and instead more time spent feeling aggressive and negative emotions (Kashdan & Collins, 2010). Internet addiction, which is linked to many negative psychological and behavioral conditions (Tonioni, 2013; Salicetia, 2015; Beard, 2005), has also been found to be linked to happiness (Sapmaz & Totan, 2018; Rastegarian et al., 2022; Mognaziadeh et al., 2018). In a study conducted with adolescents, it was stated that there was a strong negative relationship between happiness and internet addiction (Evli & Şimşek, 2022). In the study, which comparatively investigated individuals with normal internet use, individuals with mild addiction and individuals with strong internet addiction, it was found that normal users and those with mild internet addiction were happier and had higher levels of social closeness than those with high internet addiction. It has been stated that individuals may develop internet addiction if they have positive emotional needs (Rastgar & al., 2015).

Adolescence, when physical, emotional and sexual development and changes occur rapidly in individuals' lives, is the period when social influence is very important for the individual (Parlaz & al., 2012). Adolescents' happiness varies according to their individual variables rather than environmental variables (Çankaya & Meydan, 2018). While individuals who feel happy can keep up with changes better (Alisinanoğlu, 2002), the internet addiction of individuals with increased happiness levels decreases (Totan & al., 2019), and the happiness levels of individuals with high levels of social anxiety decrease (Tuncer, 2017) and their internet addiction increases. (Nwufo et al., 2023). Healthy development of adolescents is considered important for identity formation (Koç, 2004).

**OBJECTIVE AND HYPOTHESES:** In this regard, the main problem of this study is; To reveal the relationship between internet addiction, social anxiety and happiness in adolescents and to determine the direction and level of the relationship. Although there are studies examining these

concepts with different variables, no studies on adolescents containing the three concepts together were found. Within the framework of the main problem, answers are sought to the following questions:

- 1. What is the direction and level of the relationship between internet addiction and happiness in adolescents?
- 2. What is the direction and level of the relationship between internet addiction and social anxiety in adolescents?
- 3. What is the direction and level of the relationship between social anxiety and happiness in adolescents?
- 4. Do adolescents' internet addiction, happiness and social anxiety levels differ according to gender and academic achievement?

#### **Material and Methods**

## Research design

This section will include information about the research model, study group, data collection tools, data collection and how the data is analyzed. This study, which has a quantitative research paradigm, aims to determine the relationships between internet addiction, social anxiety and happiness in adolescents. For this purpose, the research was carried out according to the relational screening model, which is a subtype of the general screening model. General survey models are survey studies conducted in a universe consisting of a large number of elements, on the entire universe or on a group of samples or samples taken from the universe, in order to reach a general judgment about the universe. General scanning models enable singular or relational scanning (Karasar, 2015). Relational screening models are research models that aim to determine whether the change between two or more variables exists together or the degree of this change (Karasar, 2015). The data collected from the sample group was analyzed with the SPSS Statistics23 program, and descriptive statistics, independent sample T test, One-Way ANOVA, Pearson Correlation, Post Hoc (Scheffe) methods were used.

## **Instruments**

**Demographic Information Form:** In the form prepared by the researchers, gender, financial income, class level, academic achievement level, mother's education level, father's education level;

It includes information about the level of relationship with mother, father and siblings, average daily internet usage time, internet connection tool, and whether the participant defines himself or herself as addicted.

School Children's Happiness Inventory: It was prepared to determine the happiness levels of children and the variables that affect their happiness. The scale, which consists of 15 positive and 15 negative items, can be applied to individuals between the ages of 8 and 15. On a Likert-type 4-point scale, 1 is the lowest and 4 is the highest item score. A score of 4 indicates a high level of happiness. The lowest score from the scale can be 30 and the highest score can be 120. The validity and reliability study was conducted by Ivens (2007). It was adapted into Turkish by Telef (2014). Young Internet addiction Test Short Form: It was developed by Young and converted into a short form by Pawlikowski et al. It was adapted into Turkish by Kutlu et al. (2016). The 5-point Likert type scale (1=Never, 5=Very often) consists of 12 items. As the score obtained from the scale increases, it shows that the level of internet addiction increases.

Social Anxiety Scale for Children: The scale is a self-report scale consisting of 18 items, prepared as a 5-point Likert type (1 = Never, 5 = Always). The scale developed by La Greca et al. (1988) was adapted into Turkish by Demir et al. (2000). It is stated that the anxiety level increases as the scores increase on the scale, where the lowest score can be 18 points and the highest score is 90 points. The internal consistency of the scale was found to be 0.81 according to the Cronbach's alpha method. Test-retest correlation is high (r=0.81).

## **Participants**

The research group consists of a total of 1170 students, 683 girls and 487 boys, who continue their education in the 6th, 7th and 8th grades of secondary school in Arnavutköy district in the 2023-2024 academic year (Table-1).

Table 1. Participant Gender

T	able-1	Frequency	Percent	Valid Percent	Total Percent
Valid	Women	683	58,4	58,4	58,4
	Men	487	41,6	41,6	100,0
	Total	1170	100,0	100,0	

As seen in Table-2, 313 (26.8%) of the students participating in the research were 6th grade students, 599 (51.2%) were 7th grade students, and 258 (22.1%) were 8th grade student.

**Table 2**. Grade Level

Gra	ade	Frequency	Percent	Valid Percent	Total Percent
	6.th	313	26,8	26,8	26,8
Valid	7.th	599	51,2	51,2	77,9
vana	8.th	258	22,1	22,1	100,0
	Total	1170	100,0	100,0	

As seen in Table-3, 94 (8%) of the students have a low level of success, 755 (64.5%) have a medium level of success, and 321 (27.4%) have a high level of success.

Table 3. Academic Success

Acaden	Academic Success		Percent	Valid Percent	Total Percent
	Low	94	8,0	8,0	8,0
37-193	Middle	755	64,5	64,5	72,6
Valid	High	321	27,4	27,4	100,0
	Total	1170	100,0	100,0	

In Table-4, the number of people using the internet for less than 1 hour per day is 324 (27.7%), the number of people using it for 1-3 hours is 484 (41.4%), and the number of people using it for 3-6 hours is 214 (18.3%). The number of people using it for 6-8 hours is 73 (6.2%), and the number of people using it for more than 8 hours is 75 (6.4%).

Table 4. Average Daily Internet Usage Time

Daily Inter	net Usage Time	Frequency	Percent	Valid Percent	Total Percent
	0-1 hour	324	27,7	27,7	27,7
	1-3 hours	484	41,4	41,4	69,1
Valid	3-6 hours	214	18,3	18,3	87,4
vand	6-8 hours	73	6,2	6,2	93,6
	More than 8 hours	75	6,4	6,4	100,0
	Total	1170	100,0	100,0	

#### **Results**

This study aimed to examine the relationships between internet addiction, social anxiety and happiness in adolescents. Data analysis was done with SPSS Statistics23 program, descriptive statistics, independent sample T test, One-Way ANOVA, Post Hoc (Scheffe) to compare the means between variables; Pearson Product Moment correlation methods were used to examine the relationship between variables.

When internet addiction averages were compared according to grade level, it was seen that there was a significant difference between the 6th and 7th and 8th grades, and that there was no significant difference between the 7th and 8th grades (Table-5).

**Table 5.** Comparing the Internet addiction averages according to grade level

	Tuble c. Comparing the internet addressed a verages according to grade level									
Grade	N	Mean	Std. Deviation	Sum of Squares	df	Mean Square	F	Sig.	Significances	
6. grade (1)	313	2,2223	,68223	6,712	2	3,356	6,462	,002		
7. grade (2)	598	2,3767	,72611	605,522	1166	,519			1-2,3; 2-1; 3-1	
8. grade (3)	258	2,4186	,75253	612,234	1168					
Total	1169	2,3446	,72400							

Significant differences have been found between male and female students in terms of internet addiction averages. The average internet addiction scores of male students were significantly higher compared to those of female students. However, when examining the levels of social anxiety and the scores from the school children's happiness inventory, no significant gender differences were observed (Table-6).

Table 6. Comparing the Internet Addiction, Social anxiety and Happiness between male and female school children

Variable	Gender	N	Ortalama	S.S.	t	sd	P
Internet Addiction	Woman	683	2,3075	,75365			
internet radiction	Man	487	2,3970	,67679	-2,087	1168	,037
Social anxiety	Woman	683	2,4123	,78451			
Social alixiety	Man	487	2,3365	,71211	1,692	1168	,091
Hannings	Woman	683	3,0620	,52590			
Happiness	Man	487	3,0212	,49552	1,338	1168	,181

It was observed that social anxiety averages did not differ significantly according to grade levels (Table-7).

Table 7. Comparing social anxiety according to grade levels

Grade	N	Mean	Std. Deviation	Sum of Squares	df	Mean Square	F	Sig.	Significances
6. grade (1)	313	2,3890	,75834	,913	2	,456	,798	,450	No meaningful
7. grade (2)	598	2,3988	,74073	666,912	1166	,572			difference has
8. grade (3)	258	2,3288	,78885	667,825	1168				been found.
Total	1169	2,3807	,75615						

When the happiness averages were compared according to grade level, it was seen that there was a significant difference between the 6th grades and the 7th and 8th grades, and there was no significant difference between the 7th and 8th grades (Table-8).

**Table 8.** Comparing happiness according to grade levels

	Table 6. Comparing nappliness according to grade levels									
Grade	N	Mean	Std. Deviation	Sum of Squares	df	Mean Square	F	Sig.	Significances	
6. grade (1)	313	3,1478	,49740	4,808	2	2,404	9,236	,000	1-2,3; 2-1; 3-1;	
7. grade (2)	598	3,0205	,50859	303,496	1166	,260				
8. grade (3)	258	2,9786	,52885	308,304	1168					
Total	1169	3,0453	,51377							

When analyzing whether internet addiction varies according to academic level, a significant difference was found between students with low and high academic levels. However, no significant difference was observed between students with medium academic level and those with either high or low academic levels (Table-9).

Table 8. Comparing internet addiction according to academic level

Academic level	N	Mean	Std. Deviation	Sum of Squares	df	Mean Square	F	Sig.	Significances
Low (1)	94	2,5381	,80319	6,077	2	3,038	5,850	,003	1-2,3; 2-1,3; 3-1,2
Middle (2)	755	2,3577	,68787	606,181	1167	,519			
High (3)	321	2,2577	,76938	612,258	1169				
Total	1170	2,3448	,72370						

When examining the relationship between internet addiction and social anxiety, a positive, moderately significant relationship was found at the .01 level (0.01 <= .314). In terms of the relationship between internet addiction and happiness, a negative, moderately significant relationship was found at the .01 level (0.01 <= -.394). Similarly, when examining the relationship between social anxiety and happiness, a negative, moderately significant relationship was observed at the .01 level (0.01 <= -.350) (Table-10).

Table 10. Correlation matrix of study variables

Vari	able	Internet Addiction	Social Anxiety	Happiness
Internet Addiction	Pearson Correlation	1	,314**	-,394**
	Sig. (2-tailed)		,000	,000
	N	1170	1170	1170
Social Anxiety	Pearson Correlation	,314**	1	-,350**
	Sig. (2-tailed)	,000		,000
	N	1170	1170	1170
Happiness	Pearson Correlation	-,394**	-,350**	1
	Sig. (2-tailed)	,000	,000	
	N	1170	1170	1170
**. Correlation is significan	t at the 0.01 level (2-tailed).			

#### **Discussion**

According to the results of this study, a positive significant relationship was found between internet addiction and social anxiety in adolescents. When looking at the relationship level, a medium level relationship was observed. In a study conducted on secondary school students, it was determined that there was a positive, moderately significant relationship between internet addiction and social

anxiety, which supports the results of our study (Karaca & al., 2016). In a study with similar findings, a positive significant relationship was found (Huan & al., 2014). According to the results of the research conducted on children aged 8-12, it was stated that there was a positive significant relationship between computer game addiction and social anxiety and that social anxiety significantly predicted game addiction at a level of 24.1% (Taş & Güneş, 2019). When other studies are examined, the averages of social phobia and state anxiety are significantly higher in people with problematic internet use (Cole & Hooley, 2013), and according to the results of the research conducted on university students, anxiety symptoms and internet addiction are related (Dalbudak & al., 2014). It has been found that individuals who are frequent internet users have lower levels of social development and higher social anxiety (Harman et al., 2005). Individuals with high levels of social anxiety use online platforms where the danger is low to reduce their anxiety levels, and in this way they feel better in the short term, but as a result, face-to-face communication skills of individuals are damaged in the long term (Caplan, 2006). According to the results of a study conducted with university students, there is a positive relationship between social anxiety and social media addiction levels. At the same time, social media addiction significantly predicts social anxiety (Baltacı, 2019). It has been stated that the risk factors for problematic internet use are the abundance of social friends, high stress level, weakness in peer relationships, problematic communication with friends, teachers and family, and it has been stated that the awareness levels of teachers and families on the subject should be increased in order to eliminate the risk factors (Wang & al., 2015).

Looking at the other finding of the study, it was found that there was a negative, moderately significant relationship between internet addiction and happiness. According to the findings of a research conducted on university students with similar results, internet addiction decreases as the level of happiness increases (Totan & al., 2019). According to a study that contradicts the research findings, it is stated that the use of social networking sites positively predicts happiness, but this situation will reverse as time goes by (Doğan, 2016). According to the results of another study conducted on university students, it was stated that as the risk of internet addiction increases, individuals' happiness levels and life satisfaction will decrease (Ergün & Meriç, 2020). It has been stated that time spent on social media is the 29th preferred activity among individuals' 30 happiness activities (Tandoc Jr & al., 2015). In a study examining the effect of internet addiction on

happiness, it was revealed that addiction negatively predicts happiness (Hayes & al., 2015). According to the research conducted on high school students, it was found that there was a negative and low level relationship between internet addiction and happiness, and that happiness differed significantly according to gender, but internet addiction did not differ significantly according to gender. (Akbaş & Gökbulut, 2023). In our study, it was determined that there was a significant difference in internet addiction averages according to gender. According to a study conducted on psychological counselors, it was found that internet usage level and happiness did not differ significantly by gender (Arslan, 2018). In the research conducted on adolescents, it was determined that adolescents were in the risk group in terms of digital game addiction and their happiness levels were medium. It has been determined that there is a moderately significant negative relationship between digital game addiction and happiness (Kaya, 2021). According to the results of the research conducted on university students, social media addiction negatively predicts social anxiety and happiness, and there is a negative relationship between social media addiction level and happiness (Baltaci, 2019). According to the research conducted using keywords from various databases; The group that starts to use the internet the most is adolescents, the symptoms of addiction described to adults and young adults are also seen in adolescents, more and more adolescents show symptoms of internet addiction and pathological use every day, as a result, their social relationships deteriorate, their academic success decreases and all areas of their lives are negatively affected. (Ceyhan, 2008).

Looking at the other finding of the research, it was found that there was a negative, moderately significant relationship between social anxiety and happiness. According to a study conducted on university students, individuals with high levels of social anxiety were found to have lower happiness levels than others (Öztürk & Mutlu, 2010). Another study revealed that social anxiety plays a mediating role in the relationship between social approval and happiness (Karasar & Baytemir, 2018). According to a study conducted among second-year high school female students, it was found that social anxiety predicted happiness and the negative relationship between social anxiety and happiness was significant at the .01 level (Abedzadeh & Mahdian, 2014). According to a study conducted on individuals with social anxiety disorder, it was determined that the patient group gave less accurate answers in describing happiness in spoken language compared to the healthy control group (Bodner et al., 2012). According to a study examining how social anxiety

affects the recognition of emotional expressions, individuals with low and high social anxiety could recognize sad and angry faces equally, while individuals with high social anxiety took longer to recognize happy faces than those with low social anxiety (Silvia et al., 2006). According to the results of the study conducted on nursing students, it was stated that happiness had a negative predictive effect on social anxiety, and social anxiety had a negative predictive effect on happiness. It has been stated that increasing individuals' happiness levels depends on studies that reduce social anxiety (Son & Kim, 2020). A positive correlation was found between happiness and sociability, and a negative correlation was found between happiness and social anxiety in people who were administered the Oxford Happiness Inventory and various personality measurement tests (Neto, 2001). Happiness is an important factor in both adolescents and adults, and it has been stated that individuals with high levels of happiness are more satisfied with life and experience more positive emotions than negative emotions (Cankaya & Meydan, 2018). While the perspective of happiness and evaluation of life events affect happiness, it has also been emphasized that the influence of the family is important on the happiness of adolescents. It has been stated that ensuring emotional closeness in the family, transparent communication, providing an environment of trust in family interaction, and ensuring that the adolescent does not feel excluded from the family have a happiness-increasing effect (Eryılmaz, 2009).

## **Suggestions**

The study was carried out in 6-8. Since it covers grades and does not examine adolescents in high school, studies can be conducted on this group in future studies. By conducting studies based on the risk factors determined for adolescents' internet addiction, social anxiety levels can be reduced and happiness levels can be increased. It is thought that measures can be taken to increase the happiness of adolescents through family education on issues such as parental attitudes, communication within the family, and parenting in adolescence. In order to reduce social anxiety, it is thought that it is important to take measures to reduce the time and increase the efficiency of virtual environments and to ensure that adolescents can do activities in real life spaces.

## Data availability statement

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author.

#### **Ethics statement**

The studies involving human participants were reviewed and approved by ethics committee of Istanbul University.

#### **Author contributions**

All authors contributed to the study conception and design, material preparation, data collection and analysis. All authors contributed to the article and approved the submitted version.

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#### **Conflict of interest**

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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