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DIGITAL ADDICTION AND SATISFACTION LEVELS OF STUDENTS TAKING ACCOUNTING EDUCATION

Abstract

In this study, a questionnaire was applied to measure the level of digital addiction and satisfaction of the students who received accounting education. First, demographic characteristics, frequency and percentage values of the participants were examined. Then, an analysis of whether the averages of the answers to 5 subscales of digital addiction and 2 subscales of satisfaction differ according to departments, class, gender, residence, GPA, digital device usage hours and family income level of the participating students is performed using one-way anova and independent groups t tests. Finally, participants' digital addiction and their level of satisfaction with the education they received and their relationships with each other were examined. High level digital addiction was found in dependence subscale, and medium level digital addiction was found in the other subscales. The participants' intrinsic and extrinsic satisfaction levels were medium. In addition, relations and differences were found between the subscales of the study.

Keywords: Digital addiction, Satisfaction, Accounting Education.

MUHASEBE EĞİTİMİ ALAN ÖĞRENCİLERİN DİJİTAL BAĞIMLILIK VE MEMNUNİYET DÜZEYLERİ

Özet

Bu çalışmada muhasebe eğitimi alan öğrencilerin dijital bağımlılık ve aldıkları eğitimden memnuniyet düzeylerini ölçmek amacıyla bir anket formu uygulanmıştır. Öncelikle katılımcıların demografik özelliklerinin sıklık ve yüzde değerleri incelenmiştir. Daha sonra katılımcıların dijital bağımlılığın beş alt ölçeği ve memnuniyetin iki alt ölçeğine verdikleri karşılıkların ortalamalarının öğrencilerin bölüm, sınıf, cinsiyet, ikametgâh, not ortalaması, dijital araç kullanım saatleri ve ailelerin gelir düzeyleri itibarıyla farklı olup olmadıkları tek yönlü anova ve bağımsız gruplar t testleri ile analiz edilmiştir. Son olarak katılımcıların dijital bağımlılık ve aldıkları eğitimden memnuniyet düzeyleri ve bunların birbirleriyle olan ilişkileri irdelenmiştir. Bırakamama alt ölçeğinde yüksek; diğer alt ölçeklerde ise orta düzeyde dijital bağımlılık tespit edilmiştir. Katılımcıların içsel ve dışsal doyum düzeyleri orta düzeydedir. Ayrıca çalışmanın alt ölçekleri arasında ilişkiler ve farklılaşmalar tespit edilmiştir.

Anahtar Kelimeler: Dijital bağımlılık, Memnuniyet, Muhasebe eğitimi.

1. GİRİŞ

In general, addiction can be described as an inevitable desire for an object, person or an entity; or being under the direction of another will and reflects a pathological behavior associated with human mental activity (Uzbay, 2009: 5). Addiction is a disease can change social, biological and behavioral dimensions and arises with continued intake (Dadak et al., 2019:3380). Addiction is a desire and an aspiration resulting from a substance being taken up with repeated doses and increasing amounts, not to eliminate the symptoms of an organic disease (Bağcı, 2019: 100). Addiction is a brain disorder characterized by compulsive engagement in rewarding stimuli despite adverse consequences. Two main concepts of addiction involve substance addiction (drug addiction), which is a neuropsychiatric disorder characterized by a repeating desire to take a drug continuously despite the drug's harmful consequences. Non-substance addiction (behavioral addiction) does not involve a drug but includes similar behaviors as when one uses a drug such as pathological gambling, food addiction, internet addiction, gaming, sex addiction, and mobile phone addiction (Fluyau and Charlton, 2019: 1). On the other hand, digital addiction, which is basically defined as an addiction to digital devices and applications, primarily includes the negative effects of technological devices and applications on our daily lives, internet addiction, mobile phone addiction, social media addiction and digital game addiction (Arslan et al. 2015: 35). Various forms of digital addiction are increasingly being formally recognized and treated around the world (Berthon et al, 2019: 452). Numerous studies have been carried out in our country and in the world that address these addictions, alone or as a whole. Some of these studies are listed in Table 1.

Table 1: Studies on Addiction to Digital Tools and Applications

Addiction	Studies
Internet	Young (1998), Günüş and Kayri (2010), Akdağ et al. (2014), Ogel et al. (2015), Taylan and Işık (2015), Yılmazsoy and Kahraman (2017), Öztapak (2018), Kurnaz and Tepe (2019), Khudhair (2020), Kırnık et al. (2019), Madu (2020), Mo et al. (2020), Wani and Wani (2020).
Social Media	Aktan (2018), Bilgiliier (2018), Altayef and Karacı (2019), Özgenel et al. (2019), Tekin (2019), Kant (2020).
Digital	Khang and Kim (2013), Montag and Walla (2016), Rugai and Ekeke (2016), Sumalatha and Santhi (2016), Güney (2017), Eryılmaz and Çukurluöz (2018), Goncalves et al. (2018), Kesici and Tunç (2018a), Dilci (2019), Dilci and Ersoy (2019), Yengin (2019), Arslan (2020), Wani and Wani (2020).
Game	Elliott et al. (2012), Aydın and Horzum (2015), Yalçın and Erdogan (2015), Bhagat and Kim (2020), Ekinci et al. (2017), Ekinci et al. (2019), Hazar et al. (2017), Hazar (2019), Hazar and Hazar (2019a), Hazar and Hazar (2019b), Kanat (2019), Kızbes (2019), Oral and Arabacıoğlu (2019), Yavuz et al. (2019), Karahüseyinoğlu et al. (2020).
Technology	Savcı and Aysan (2017), Ertemel and Aydın (2018), Küçükvardar and Tıngöy (2018), Wang et al. (2019).
Mobil Phone	Spangler and Skovira (2015), Fidan (2018), Özdemir et al. (2019).
Computer	Shaffer et al. (2000).

Many studies have been conducted on the addiction of university students on digital tools and applications. Some of those are Akdağ et al. (2014), Ekinci et al. (2017), Aktan (2018), Bilgiliier (2018), Hazar and Hazar (2019b), Kanat (2019), Kesici and Tunç (2018a), Arslan (2020). In literature, various scales investigating addictions such as internet, game, social media etc. have been developed and various researches have been conducted on this subject. Additionally, scales have been developed that handle such digital devices as a whole. In our study, we saw all such devices as digital devices and examined the addiction related to them as a whole. So we used digital addiction scale for university students developed by Kesici and Tunç (2018b) in order to measure the level of digital addiction of the participants.

Second aim of our study is to measure the satisfaction of university students who received accounting education. For this purpose, Minnesota Satisfaction Scale developed by Weiss et al. (1967) was adapted and used.

Third aim of the study is to reveal the differences between the participants' digital addiction levels, educational satisfaction levels, and their responses to various demographic features and the relationships between them. For this purpose, various statistical analyzes were conducted to investigate the relationships and differences between variables.

2. METHODOLOGY OF THE RESEARCH

2.1. Purpose of the research

Purpose of this research is to measure the levels of digital addiction and satisfaction of education students who receive accounting training. In addition, relations between satisfaction, digital addiction and variables such as department, gender and residence of participants were revealed.

2.2. Universe and Sample of the Research

The universe of the research is the students of Kütahya Dumlupınar University Faculty of Applied Sciences. All students of the Faculty were included in the study. Therefore, the sample was chosen randomly among the students of Kütahya Faculty of Applied Sciences.

2.3. Scope and Limitations of the Research

In our study, a questionnaire was applied to 600 students studying at Kütahya Dumlupınar University Faculty of Applied Sciences. The number of valid questionnaires obtained in the study was 463. Thus, the survey return rate was calculated as 77%. It can be said the ability to represent all students accounting training in Turkey to be low because the questionnaire was applied only in one faculty in our study. On the other hand, although the questionnaire forms, which were produced for purposes similar to the purpose of our study and have been used, which have proved their proficiency and reliability, the study may also contain errors due to the misunderstanding of the participants' statements of the questionnaire.

2.4. Development of Measurement Device

In our study, a questionnaire was prepared using Digital Addiction Scale and Minnesota Satisfaction Scale and applied to the participants to collect primary data. Statements of the questionnaire were prepared with a 5-point Likert scale. The participant indicated the degree of attitude related to each item by marking one of these options. The digital addiction scale includes five subscales and 19 expressions, and the Minnesota Satisfaction Scale contains two subscales and 20 expressions.

2.5. Data Collection Process

The questionnaire was distributed to 600 randomly selected students at the Faculty of Applied Sciences in November-December 2019. In this process, some students refused to answer the questionnaire, and others did not return the questionnaire. Thus, 520 of the distributed questionnaires were taken back. It was seen that 463 questionnaires were valid because some of these questionnaire forms were filled with sloppy or some were left blank. Thus, the return rate of the survey was calculated as approximately 77%.

3. ANALYSIS OF DATA

Various statistical techniques were used to evaluate the research data. Statistical operations were made with SPSS 17 statistical software. Descriptive and procedural statistical techniques were used for these analyzes. First, demographic characteristics, frequency and percentage values of the participants were examined. Then, an analysis of whether the averages of the answers to 5 subscales of digital addiction and 2 subscales of satisfaction differ according to departments, class, gender, residence, GPA, digital device usage hours and family income level of the participating students is performed using one-way Anova and independent groups t tests. Finally, participants' digital addiction, their level of satisfaction with the education they received and the relations between the two were examined.

3.1. Reliability of the Research

The reliability study of the questionnaire was made by calculating the internal consistency coefficient (Cronbach alpha) values. Cronbach alpha coefficient is a measure of the internal consistency (homogeneity) of the items in the scale. Alpha coefficient is a weighted standard change average found by proportioning the total of the variances of the k expression in the scale to the general variance (Özdamar, 1997: 493). If the scale's alpha coefficient is high, it is interpreted as “the items in this scale consisted of items that are consistent with each other and poll the elements of the same feature or all items work together to that extent” (Alpar, 2003: 381)¹. Cronbach Alpha test was used to test the reliability of the Digital Addiction Scale and Minnesota Satisfaction Scale used in the research. Alpha coefficients for the scales used in the study calculated as, 0.860 for the entire Digital Addiction Scale; 0.718 for overuse, 0.829 for non-restraint, 0.804 for inhibiting the flow of life, 0.763 for Emotional state, and 0.706 for dependence. On the other hand, alpha coefficients calculated for Minnesota Satisfaction Scale are 0.923 for the entire scale; 0.877 for intrinsic satisfaction and 0.842 for extrinsic satisfaction. According to these values, overuse, emotional state and dependence scales are very reliable scales. Digital Addiction and Minnesota Job Satisfaction scales and other subscales of both scales are highly reliable scales.

3.2. Findings

3.2.1. Demographic Features

In our questionnaire, it is investigated department of the participants, class, education type, gender, place of residence, grade point averages, number of failed courses, most used devices and daily digital device use. The results obtained are presented in Table 2 in terms of frequency and percentage.

¹ Depending on Cronbach Alpha Coefficient, the reliability of the scale is interpreted as follows (Kalaycı, 2006: 405; Alpar, 2003: 382):

If $0.80 \leq \alpha \leq 1.00$, the scale is a highly reliable scale,

If $0.60 \leq \alpha \leq 0.80$, the scale is a very reliable scale,

If $0.40 \leq \alpha \leq 0.60$, the reliability of the scale is low,

If $0.00 \leq \alpha \leq 0.40$, the scale is not reliable.

Table 2: Demographic Characteristics

Responder's Characteristics	Freq.	%	Responder's Characteristics	Freq.	%
Department			Grade Point Averages		
Banking and Finance	193	41,7	0,00 – 1,00	8	2,1
Accounting	163	35,2	1,01 – 2,00	137	35,2
Insurance and Risk Management	107	23,1	2,01 – 3,00	210	54,0
Class			3,01 – 4,00	34	8,7
1	135	29,2	Number of Failed Courses		
2	108	23,3	None	155	37,1
3	103	22,2	1	78	18,7
4	117	25,3	2	76	18,2
Education Type			3	50	12,0
Normal Education	333	71,9	4	31	7,4
Evening Education	130	28,1	5	14	3,3
Gender			More than 5	14	3,3
Women	242	52,3	Most Used Device		
Man	221	47,7	Mobile Phones	440	95,2
Residence Type			Tablet	1	0,02
Homestay	50	10,8	Computer	17	3,7
Students House	163	35,2	Game console	2	0,04
Dorm	250	54,0	Music Player	2	0,04
Feeling Successful			Daily Digital Device Usage		
Feeling Successful	349	76,4	0 – 1 hour	5	1,1
Feeling Failed	108	23,6	1 – 2 hours	48	10,4
Average Income of Family			2 – 3 hours	113	26,4
500-1.000 ₺	34	7,4	More than 3 hours	297	64,1
1.001-2.000 ₺	84	18,2			
2.001-3.000 ₺	163	35,4			
3.000 ₺ and above	180	39,0			

42% of the participants are from the students of the Department of Banking and Finance, 35% of them are from Accounting and 23% of them are from Insurance and Risk Management departments. It can be said that these rates are approximately compatible with the number of students of the departments. On the other hand, while 72% of the participants are normal education students and 52% are women; 70% of our faculty students are normal education and 48% are woman students. 54% of the participants reside in student dormitories and 35% are in student houses. The average monthly income of the families of 61% of the participants is below 3,000 ₺. In addition, it is seen that 95% of the participants use mobile phones the most and 64% use digital devices more than three hours a day. When the success levels of the participants are examined, it is seen that 37% of them have no failed courses. However, it is not possible for freshmen to have failed courses. Therefore, the analysis was repeated by removing the freshmen and the results in Table 3 were reached. According to the results obtained, it is seen that approximately 93% of the 283 participants attending the upper classes have at least one failed course and 65% have 2 or more. This is an indication that student success is very low.

On the other hand, as of the study period, grade point averages of freshmen have not been calculated yet. For this reason, the weighted grade point averages of the students were recalculated excluding freshmen, and presented in Table 4. According to the results, it is seen that 39.4% of the participants are below 2 out of 4.

Table 3: Number of Failed Courses

Number of Failed Courses	N	%
None	20	7,07
1	78	27,56
2	76	26,86
3	50	17,67
4	31	10,95
5	14	4,95
More than 5	14	4,95

Considering that the average of the student must be at least 2 out of 4 in order to graduate, it can be said that the level of success of the participants is low. Despite this, as seen in Table 2, 76.4% of the participants stated that they saw themselves as successful in their school and private life.

Table 4: Grade Point Averages Excluding Freshmen

Mean	N	%
0,00 – 1,00	4	1,2
1,01 – 2,00	124	38,2
2,01 – 3,00	168	51,7
3,01 – 4,00	29	8,9

3.2.2. Digital Addiction Levels

In the study, a 5-point Likert scale was used on the scale used to measure the levels of digital addiction of the participants. Addiction levels for each subscale of the scale used were calculated as shown in Table 5. Highest score that can be obtained in the overuse subscale was calculated as 25 because of there are 5 expressions in the subscale and the highest score in each statement is 5.

Table 5: Means Standard Deviation and Levels of Digital Addiction Subscales

	Overuse	Non- Restraint	Inhibiting the Flow of Life	Emotional State	Dependence
Highest Possible Score	5 * 5 = 25	3 * 5 = 15	4 * 5 = 20	4 * 5 = 20	3 * 5 = 15
Number of Levels	3	3	3	3	3
Low	0-8.33	0-5.00	0 -6.67	0 -6.67	0-5.00
Medium	8.33-16.67	5.01-10.00	6.68 – 13.33	6.68 – 13.33	5.01-10.00
High	16.67 and above	10.01 and above	13.33 and above	13.33 and above	10.01 and above
Mean	14.11	7.95	10.05	10.57	11,07
Standard Deviation	4.74	3.40	4.28	4.02	3.34
Level	Medium	Medium	Medium	Medium	High

On the other hand, value of 15 was calculated for non-resistant and dependence, and 20 for inhibiting the flow of live and emotional state. Since there are three levels as low, medium and high, highest scores are divided into 3 and a triple rating is made. Thus, it was found high level digital addiction in dependence subscale and medium level digital addiction in the other subscales.

The analysis of the data in the research was done in SPSS 17 statistical package program. Since the 5-point Likert scale did not start from zero, the ranges in Table 6 were used to evaluate the answers of the participants. Assuming the intervals are equal, the score ranges are determined as 0.80 as follows:

$$\text{Score Range} = (\text{Highest Value} - \text{Lowest Value}) / 5 = (5 - 1) / 5 = 0,80$$

Table 6: Ranges of 5-Point Likert Scale Evaluation

Options	Range (1 – 5)
Totally Disagree / Extremely Dissatisfied	1,00 - 1,80
Disagree / Somewhat Dissatisfied	1,81 - 2,60
Neither Agree No Disagree / Neither Satisfied nor Dissatisfied	2,61 - 3,40
Agree / Somewhat Satisfied	3,41 - 4,20
Totally Agree / Extremely Satisfied	4,21 - 5,00

3.2.2.1 Overuse Subscale

Means and standard deviations of the expressions in the overuse subscale are presented in Table 7.

Table 7: Mean and Standard Deviations of The Expressions in The Overuse Subscale

Expressions	Mean	S.D.
While eating my meal, I am occupied with mobile phone, tablet, or computer.	2,9475	1,5266
I continuously look at the digital devices (mobile phone or tablet) in a trip, picnic or social environments where I am with my friend.	2,5788	1,2900
I find myself checking my digital devices upon dealing with a work.	2,8939	1,3529
I overuse the digital devices out of their purposes.	2,9395	1,2929
AI deal with the digital devices like table even if I do demanding things	2,7538	1,4534

Mean of the responses to the statements in the overuse subscale are between 2.9475 and 2.5788 and standard deviations are between 1.5266 and 1.2900. When the results are evaluated, it can be said that the averages of the expressions in the overuse subscale are between “indecision” and “disagree” considering the scale used.

3.2.2.2. Non-Restraint Subscale

Means of the responses to the statements in the non-restraint subscale are presented in Table 8. Mean of the responses to the statements in the non-restraint subscale are between 2,8723 and 2,3739 and standard deviations are between 1,2493 and 1,3528. Accordingly, the average of the responses given is between "indecision" and "disagree".

Table 8: Mean and Standard Deviations of The Expressions in The Non-Restraint Subscale

Expressions	Mean	S.D.
I cannot control myself on the amount of time of using the digital devices	2,7093	1,3538
I have unsuccessful attempts to reduce the time I spend with the digital devices	2,3739	1,3347
I cannot reduce the time I spend with the digital devices	2,8723	1,2493

3.2.2.3. Inhibiting the Flow of Life Subscale

Means of the responses to the statements in the inhibiting the flow of life subscale are presented in Table 9.

Table 9: Mean and Standard Deviations of The Expressions in The Inhibiting the Flow of Life Subscale

Expressions	Mean	S.D.
The digital devices prevent me from doing my responsibilities related to home and school	2,2675	1,3138
I have missed many opportunities because of spending a lot of time with the digital devices	2,6513	1,3951
I am unaware of what happens around me when I deal with the digital devices	2,2731	1,3073
I feel that I become less creative because of using the digital devices	2,8731	1,3724

Mean of the responses to the statements in the non-restraint subscale are between 2,8731 and 2,2675 and standard deviations are between 1,3951 and 1,3073. Thus, it is seen that the answers given to this subscale are between "indecision" and "disagree".

3.2.2.4. Emotional State Subscale

Means of the responses to the statements in the emotional state subscale are presented in Table 10. Mean of the responses to the statements in the emotional state subscale are between 3,1725 and 2,3037 and standard deviations are between 1,3914 and 1,1566. As a result, it can be said that the responses given to the emotional state subscale are between "indecision" and "disagree".

Table 10: Mean and Standard Deviations of The Expressions in The Emotional State Subscale

Expressions	Mean	S.D.
Assigning a job to me when I spend time with digital devices makes me annoyed	2,3037	1,3525
The environments where I cannot use the digital devices bore me.	2,6348	1,3914
I feel very unhappy and angry when I do not use my digital devices for a long time	2,4524	1,3502
I feel very happy I spend time with the digital devices	3,1725	1,1566

3.2.2.5. Dependence Subscale

Means of the responses to the statements in the dependence subscale are presented in Table 11. Mean of the responses to the statements in the dependence subscale are between 3,8074 and 3,6083 and standard deviations are between 1,4134 and 1,3884. Thus, the averages of the responses given to the dependence subscale appeared as "agree".

Table 11: Mean and Standard Deviations of The Expressions in Dependence Subscale

Expressions	Mean	S.D.
That my digital devices are broken or get lost makes me anxious	3,8074	1,3884
Even if I leave my house for a short time, I want to take the digital devices like phone/tablet with me	3,6083	1,4134
I keep digital devices like smart phone or tablet around when I goes to sleep	3,6557	1,4056

3.2.3. Satisfaction Levels

In the study, Minnesota Satisfaction Scale was used to measure the satisfaction levels of the participants with the education they received. 5-point Likert scale (1 extremely dissatisfied, 2 somewhat dissatisfied, 3 neither satisfied nor dissatisfied, 4 somewhat satisfied and 5 extremely satisfied) was used in the questionnaire. The scale consists of two subscales, intrinsic and extrinsic. Satisfaction levels for each subscale of the scale used were calculated as shown in Table 12.

Table 12: Satisfaction Levels

	Intrinsic	Extrinsic
Highest Possible Score	$12 * 5 = 60$	$8 * 5 = 40$
Number of Levels	3	3
Low	0 - 20	0-13,33
Medium	21 - 40	13,33-26,67
High	41 and above	26,67 and above
Mean	38,89	26,11
Standard Deviation	9,85	6,65
Level	Medium	Medium

Since there are 12 questions and the highest score that can be obtained from each question is 5, highest score that can be obtained was calculated as 60 in the intrinsic satisfaction subscale. On the extrinsic satisfaction subscale, the highest score ($8 * 5$) was 40. Since there are three levels as low, medium and high, highest scores are divided into 3 and a triple rating is made. After all of the analyzes, it was seen that the participants' intrinsic and extrinsic satisfaction levels were medium level.

3.2.3.1. Intrinsic Satisfaction Subscale

Intrinsic satisfaction subscale consists of 12 expressions, and intrinsic satisfaction levels of participants were determined as (38,89) medium. Yalçın (2019: 2862) applied the same questionnaire to a similar group and determined the intrinsic satisfaction level as (40.78) high. Means and standard deviations of the responses to the statements are presented in Table 13. When the average of the responses given to the statements in this subscale are examined; it is seen that all of the statements are over 2,75 and between "somewhat satisfied" and "extremely satisfied". Moreover, the fact that standard deviations are above 1 in all expressions indicates that the distinctive feature of the test is high and that the participant group is heterogeneous.

Table 13: Mean and Standard Deviations of The Expressions in The Intrinsic Satisfaction Subscale

Expressions	Mean	S.D.
The feeling of accomplishment I get from the job	3,6167	1,27924
The chance to be "somebody" in the community	3,4900	1,21171
The chance to do things for other people	3,4062	1,23488
The chance to work alone on the job	3,3377	1,14765
Being able to do things that don't go against my conscience	3,3267	1,34826
The freedom to use my own judgment	3,2561	1,28839
The chance to do something that makes use of my abilities	3,2084	1,33034
The way my job provides for steady employment	3,2058	1,31499
The chance to try my own methods of doing the job	3,1722	1,30906
Being able to keep busy all the time	3,0066	1,10762
The chance to do different things from time to time	2,9316	1,24701
The chance to tell other people what to do	2,7506	1,30589

3.2.3.2 Extrinsic Satisfaction Subscale

Extrinsic satisfaction subscale consists of 8 expressions, and extrinsic satisfaction levels of participants were determined as (26,10) medium. Yalçın (2019: 2862) applied the same questionnaire to a similar group and determined the extrinsic satisfaction level as (27,43) high. Means and standard deviations of the responses to the statements are presented in Table 14.

Table 14: Mean and Standard Deviations of The Expressions in The Extrinsic Satisfaction Subscale

Expressions	Mean	S.D.
The praise I get for doing a good job	3,4967	1,22044
The chances for advancement on this job	3,3311	1,29070
The competence of my supervisor in making decisions	3,2969	1,20728
The working conditions	3,2768	1,17170
The way my co-workers get along with each other	3,2671	1,16425
The way company policies are put into practice	3,2084	1,19109
The way my boss handles his men	3,1283	1,18804
My pay and the amount of work I do	3,0822	1,32137

The average of the responses given to the expressions included in this subscale is over 3 and between "somewhat satisfied" and "extremely satisfied". On the other hand, since standard deviations are above 1 in all expressions, it can be said that the distinctive feature of the test is high.

3.2.4. Difference Analysis of Responses Given to Subscales

In this part of the study, an analysis of whether the averages of the answers to 5 subscales of digital addiction and 2 subscales of satisfaction differ according to departments, class, gender, residence, GPA, digital device usage hours and family income level of the participating students is performed using one way anova and independent groups t tests. Our hypotheses are as follows in evaluating the results of the Levene test, where the equality of the variances of the groups are tested in independent groups t test and one-way Anova analysis:

H₀: The variances of the responses given by the participants to the relevant subscale are homogeneous in terms of their groups.

H₁: Variances of the respondents given by the participants to the relevant subscale are not homogeneous in terms of their groups.

Our hypotheses are as follows in the independent groups t test and one-way Anova analysis, where we tested whether the mean of the participants' responses to the relevant subscale was different in terms of their groups:

H₀: The averages of the participants' responses to the relevant subscale are not different in terms of their groups.

H₁: The averages of the participants' responses to the relevant subscale are different in terms of their groups.

3.2.4.1. Difference Analysis of Participants in Terms of Gender and Type of Education

71.9% of the participants are normal education and 52.3% are female participants. In this part of the study, it was analyzed whether the participants' averages their answers for the digital addiction and the job satisfaction are different in terms of students' gender and education type via independent groups t (2-tiled) tests. In these analyzes, the homogeneity of the variances was tested first. For this purpose, Levene test p (sig) values for each subscale were examined. In this evaluation, when the p value is less than 0.05 for the relevant variable, the H₀ hypothesis will be rejected. If the H₀ hypothesis is rejected, the hypothesis will be accepted or rejected according to the p value in the second line in independent groups t test (Sipahi et al., 2010: 123).

In the analysis made in accordance to the participants' gender and the type of education they were in, it was concluded that the H_0 accepted variances were homogeneous since Levene test p values were greater than 0.05 for all subscales. On the other hand, the H_0 hypothesis was accepted for all subscales according to the independent test t test results of the participants in terms of their gender and education type. Thus, it was concluded that there was no statistically significant difference between the averages of the groups' responses to these subscales. As a result, it can be said that the averages of the participants' responses to all sub-scales of digital addiction and satisfaction scales did not differ in terms of the gender and education type of the participant.

3.2.4.2. Difference Analysis of Participants in Terms of Departments

In the study, firstly, the Levene test was applied in the one-way Anova test, where we analyzed whether the averages of the participants' responses to the sub-scales of the digital addiction and satisfaction scales differ in terms of their education type. In this test, since the p values calculated in the intrinsic and extrinsic satisfaction, overuse and non-restraint subscales are greater than 0.05, the H_0 hypothesis was accepted and the variances were found to be homogeneous. Thus, it is accepted that the basic assumption of variance analysis is provided for these scales. On the other hand, subscales of inhibiting the flow of life, emotional state and dependence, which cannot provide the basic assumption of variance analysis, were excluded from the analysis. According to the results obtained from the Tukey test on four scales that provide the basic assumption of variance analysis; It was observed that there was no difference in the mean of the responses given to the extrinsic satisfaction and non-restraint subscales. On the other hand, a significant difference was found in the mean of the responses given to the intrinsic satisfaction and overuse subscales in terms of the departments in which the participants studied. The results of the analysis are presented in Table 15.

Table 15: Difference Analysis of Participants in Terms of Departments

Expressions	Department	n	Mean	S.D.	Levene	p	Hypothesis
Intrinsic	Banking and Finance	185	3,24	0,79	,199	,013	H_1 accepted
	Accounting	154	3,12	0,87			
	Insurance and Risk Man.	98	3,43	0,77			
Overuse	Banking and Finance	193	2,74	0,90	,412	,027	H_1 accepted
	Accounting	157	2,98	1,00			
	Insurance and Risk Man.	106	2,73	0,92			

A significant difference was found between the participants studying in the Accounting and Insurance and Risk Management departments in the internal satisfaction and overuse subscales. According to this, the Insurance and Risk Management Department students have higher intrinsic satisfaction than those of the Accounting Department students. The average difference between the two groups is 0.31. In addition, the students of the department of Accounting have a higher average in terms of digital device use than the students of the Banking and Finance department.

3.2.4.3. Difference Analysis of the Participants' Classes

In the study, firstly, the Levene test was applied in the one-way Anova test, where we analyzed whether the averages of the participants' responses to the sub-scales of the digital addiction and job satisfaction scales differ in terms of their classes. In the Levene test, it was observed that the

variances were homogeneous in the subscales of intrinsic and extrinsic satisfaction, overuse and inhibiting the flow of life. However, no significant difference was found in the averages of the answers given to the scales indicated in terms of the classes in which the participants studied.

3.2.4.4. Difference Analysis of the Participants' Residence

In the analysis of whether the average of the responses given by the participants to the subscales is different in terms of staying with the family, in student house or dormitory, the variances of all scales are homogeneous except for the non-restraint subscale. However, as a result of the post hoc test, it was observed that the mean of the responses given to all subscales was not different with respect to the residences of the participants.

3.2.4.5. Difference Analysis of Participants' Daily Average Digital Device Hours

One-way Anova test was used to analyze whether the averages of the participants' responses to the subscales of the digital addiction and satisfaction scales differ in terms of daily average digital device usage hours. In this test, it was observed that the variances were homogeneous in all subscales except for dependence subscale. In the analyzes, it was observed that the average of the responses of the participants to the overuse, non-restraint, emotional state and dependence subscales differed significantly compared to the hours of daily use of digital devices. The analysis results obtained are presented in Table 16.

In the overuse subscale, there was a statistically significant difference between participants who used digital devices 2-3 hours a day and more than 3 hours, and the average difference was 0.38. Accordingly, it can be stated that participants who use daily more than 3 hours use digital devices excessively.

Table 16: Daily Digital Device Usage Hours Analysis of Participants

Expressions	Hours	n	Mean	S.D.	Levene	p	Hypothesis
Overuse	0-1 hour	4	1,90	0,93	,919	,000	H ₁ accepted
	1-2 hours	48	2,69	0,98			
	2-3 hours	110	2,57	0,89			
	More than 3 hours	294	2,95	0,94			
Non-restraint	0-1 hour	5	1,40	0,72	,454	,000	H ₁ accepted
	1-2 hours	47	2,35	0,97			
	2-3 hours	113	2,40	1,00			
	More than 3 hours	293	2,81	1,18			
Emotional State	0-1 hour	5	1,65	1,18	,450	,005	H ₁ accepted
	1-2 hours	46	2,42	0,87			
	2-3 hours	110	2,50	1,02			
	More than 3 hours	293	2,75	1,00			
Dependence	0-1 hour	4	2,92	0,92	,452	,000	H ₁ accepted
	1-2 hours	48	3,13	1,11			
	2-3 hours	110	3,38	1,06			
	More than 3 hours	294	3,91	1,07			

In the non-restraint subscale, a statistically significant difference was found between participants who used digital devices for more than 3 hours and participants who used 2-3 hours, 1-2 hours and 0-1 hours. In line with the obtained results, the highest mean was obtained from the participants who used more than 3 hours of digital devices in the non-restraint subscale.

In the emotional state subscale, a statistically significant difference was found between participants who used more than 3 hours of digital devices and participants who used 2-3 hours and 1-2 hours. In line with the results obtained, the highest mean score was obtained from the participants who used digital devices for an average of more than 3 hours in the emotional state subscale.

3.2.4.6. Difference Analysis of Participants by Monthly Income Groups

In the analysis of the difference of the mean of the responses given by the participants to the subscales according to the monthly income of the families of the participants, it was observed that the variances of all the scales were homogeneous. However, as the result of the post hoc test, it was concluded that the average of the responses given to all subscales did not differ according to the monthly income of the participants.

3.2.5. Analysis of Relations Between Scales

In the study, Spearman Correlation Analysis was applied to determine the relation between digital addiction scale, Minnesota Satisfaction scale and their subscales. The results obtained are presented in Table 17. At the end of the analyzes, a very weak and positive relation was found between digital addiction and the Minnesota Satisfaction scale at the level of 5% significance (2-tailed).

Table 17: Relation Between Scales

	Satisfaction	Digital Addiction	Extrinsic	Intrinsic	Overuse	Non-Restraint	Inhibiting the Flow of Life	Emotional State	Dependence
Satisfaction	1	,110*	,079	,119*	,804**	,783**	,652**	,767**	,401**
Digital Addiction	,110*	1	,931**	,969**	,143**	,055	,054	,069	,139**
Extrinsic	,079	,931**	1	,812**	,109*	,036	,064	,050	,105*
Intrinsic	,119*	,969**	,812**	1	,149**	,058	,046	,092	,133**
Overuse	,804**	,143**	,109*	,149**	1	,581**	,373**	,506**	,233**
Non-Restraint	,783**	,055	,036	,058	,581**	1	,415**	,553**	,198**
Inhibiting the Flow of Life	,652**	,054	,064	,046	,373**	,415**	1	,405**	-,031
Emotional State	,767**	,069	,050	,092	,506**	,553**	,405**	1	,150**
Dependence	,401**	,139**	,105*	,133**	,233**	,198**	-,031	,150**	1

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

A very high positive relation was calculated between digital addiction and extrinsic and intrinsic at 1% significance level (2-tailed). A high positive correlation was found between the satisfaction scale and the overuse, non-restraint and emotional state subscales at a 1% significance level (2-tailed). On the other hand, when the relations between the sub-scales of both scales were examined, only a positive relation at high level (2-tailed) was found between the intrinsic and extrinsic satisfaction scale. However, a moderately positive correlation at the level of 0.05 significance (2-tailed) was found between overuse, relapse and mood subscales. Apart from these, the relations detected between the subscales are generally positive and weak/very weak.

4. CONCLUSION AND RECOMMENDATIONS

In our study, a questionnaire was applied in order to measure the level of digital addiction and satisfaction of the students who received accounting education. The questionnaire was composed of Digital Addiction Scale, Minnesota Satisfaction Scale and demographic features in the literature. The universe and sample of the study are students of Kütahya Dumlupınar University, Faculty of Applied Sciences. Statistical operations were made with SPSS 17 statistical software. Descriptive and procedural statistical techniques were used for these analyzes. First of all, demographic characteristics, frequency and percentage values of the participants were examined. Then, an analysis of whether the averages of the answers to 5 subscales of digital addiction and 2 subscales of satisfaction differ according to departments, class, gender, residence, GPA, digital device usage hours and family income level of the participating students is performed using one-way Anova and independent groups t tests. Finally, participants' digital addiction and their level of satisfaction with the education they received and their relationships with each other were examined.

The reliability study of the questionnaire was done by calculating the internal consistency coefficient (Cronbach alpha) values. Overuse, emotional state and dependence scales are very reliable scales. Digital Addiction and Minnesota Job Satisfaction scales and other subscales of both scales are highly reliable scales.

It was found high level digital addiction in dependence subscale and medium level digital addiction in the other subscales. The participants' intrinsic and extrinsic satisfaction levels were medium.

The mean of the responses given to overuse, non-restraint, inhibiting the flow of life and emotional state subscales are between "indecision" and "disagree" and the average of dependence subscale is "agreed".

The averages of participants' responses to all subscales of digital addiction and satisfaction scales did not differ in terms of the gender and the education type. The students of the Insurance and Risk Management Department have higher internal satisfaction than the students of the Accounting Department. In addition, the students of the Accounting Department have a higher average in terms of digital device use than the students of the Banking and Finance Department. It can be stated that participants who use daily more than 3 hours use digital devices excessively.

In the study, Spearman Correlation Analysis was applied to determine the relations between digital addiction scale and Minnesota Satisfaction scale and their subscales. At the end of the analyzes, a very weak and positive relation was found between digital addiction and the Minnesota Satisfaction scale at the level of 5% significance (2-tailed).

A very high positive relationship was calculated between digital addiction and extrinsic and intrinsic at 1% significance level (2-tailed). A high positive correlation was found between the satisfaction scale and the overuse, non-restraint and emotional state subscales at a 1% significance level (2-tailed).

On the other hand, when the relations between the sub-scales of both scales were examined, only a positive relation at high level (2-tailed) was found between the intrinsic and extrinsic satisfaction scale. However, a moderately positive correlation at the level of 0.05 significance

(2-tiled) was found between overuse, relapse and mood subscales. Apart from these, the relations detected between the subscales are generally positive and weak/very weak.

It can be said the ability to represent all students accounting training in Turkey to be low because of the questionnaire was applied only in one faculty in our study. On the other hand, although the questionnaire forms, which were produced for purposes similar to the purpose of our study and have been used, which have proved their proficiency and reliability, the study may also contain errors due to the misunderstanding of the participants' statements of the questionnaire.

Despite the stated deficiencies of the study, it is important that the results detected high level digital addiction in dependence subscale and medium level digital addiction in the other subscales. Because digital addiction is likely to have important effects on education quality. Therefore, examining the relationship between education quality and digital addiction can yield important results. On the other hand, in our study, the level of intrinsic and extrinsic satisfaction of the participants was measured as medium level. In subsequent studies, it will be useful to discover methods that will increase the level of satisfaction with education. Finally, this study was done just before the pandemic period. Investigating the effects of events experienced and distance education in the pandemic period on digital addiction and satisfaction levels will also yield important results.

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