



ARAŞTIRMA MAKALESİ | RESEARCH ARTICLE

THE MEDIATING ROLE OF JOB SATISFACTION IN THE EFFECT OF
SMARTPHONE ADDICTION ON EMPLOYEE PERFORMANCE: A
REVIEW OF THE HEALTHCARE SECTOR DURING COVID-19
PANDEMIC

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Abstract

The purpose of this study is to investigate the mediating role of job satisfaction in the effect of smartphone addiction on employee performance. The study has been carried out in the health sector, which is the most crucial sector in the fight against the COVID-19 pandemic. Questionnaire forms have been prepared in accordance with the objectives of the study and they've been distributed to 400 people working in Adiyaman province and its districts through simple random sampling. 250 people have responded to the surveys. Five questionnaires with erroneous or partial answers haven't been assessed. Thus, 245 questionnaires have been assessed and tested in line with the study's objectives. IBM SPSS 25, Amos 23 and Excel programs have been utilized for data analysis. The findings indicate that smartphone addiction negatively affects employee performance and job satisfaction. On the other hand, job satisfaction positively affects employee performance. Furthermore, job satisfaction has a partial mediating role in the effect of smartphone addiction on employee performance. In the conclusion part of the study, the results of the analysis have been compiled and compared with the findings of similar studies in the literature. The literature study has revealed that there has never been a thorough investigation of the mediating role that job satisfaction plays in the effect of smartphone addiction on employee performance. Therefore, this study fills a significant gap in the literature of organizational behavior.

Keywords: COVID-19, Smartphone addiction, Job satisfaction, Employee performance, Health sector

AKILLI TELEFON BAĞIMLILIĞININ İŞGÖREN PERFORMANSI ÜZERİNDEKİ ETKİSİNDE İŞ TATMİNİNİN ARACI ROLÜ: COVID-19 SALGINI ZAMANINDA SAĞLIK SEKTÖRÜNDE BİR İNCELEME

Öz

Bu çalışmanın birincil ve en önemli amacı, akıllı telefon bağımlılığının işgören performansı üzerindeki etkisinde iş tatmininin aracı rolünü incelemektir. Çalışma COVID-19 pandemisi ile mücadelede en önemli sektör olan sağlık sektöründe yürütülmüştür. Çalışmanın amacına uygun olarak akıllı telefon bağımlılığı, iş tatmini ve işgören performansını ölçen anket formları hazırlanmış ve anketler, Adıyaman ilinde ve ilçelerinde çalışan 400 kişiye basit tesadüfi örnekleme yoluyla dağıtılmıştır. Anketlere 250 kişi cevap vermiştir. Eksik ve/ya hatalı cevaplanan 5 anket formu elenmiş ve değerlendirmeye alınmamıştır. Bu şekilde 245 adet anket değerlendirilmiş ve araştırmanın amacına uygun bir biçimde test edilmiştir. Veri analizi için IBM SPSS 25, Amos 23 ve Excel programları kullanılmıştır. Analiz sonuçlarına göre, akıllı telefon bağımlılığı işgören performansını olumsuz olarak etkilemektedir. Benzer şekilde akıllı telefon bağımlılığı iş tatminini de negatif olarak yordamaktadır. İş tatmini ise işgören performansını olumlu olarak etkilemektedir. Akıllı telefon bağımlılığının işgören performansı üzerindeki etkisinde iş tatmini kısmi aracılık rolüne sahiptir. Çalışmanın sonuç bölümünde analiz sonuçları derlenmiştir ve literatürde bu konuda yapılmış benzer ampirik çalışmaların tespitleriyle kıyaslanmıştır. Literatür taramasında, akıllı telefon bağımlılığının işgören performansı üzerindeki etkisinde iş tatmininin aracı rolünün daha önce incelenmediği görülmüştür. Dolayısıyla bu çalışma, örgütsel davranış literatüründe önemli bir boşluğu doldurmaktadır.

Anahtar Kelimeler: COVID-19, Akıllı telefon bağımlılığı, İş tatmini, İşgören performansı, Sağlık sektörü

INTRODUCTION

A pandemic throughout the world began around the end of 2019 as a virus known as COVID-19 spread over the world after starting in the Chinese city of Wuhan. In Turkey, the first COVID-19 case was recorded on March 11, 2020 (Budak & Korkmaz, 2020). The significance of the health sector is now everyone's top priority in our country and around the world as a result of this global disease. Once again, the COVID-19 outbreak demonstrates how closely a nation's level of development and the quality of its healthcare are related. The quality and modernity of the health sector in a country is crucial for long-term economic growth and development. This is because the most important outcomes of economic development for a nation are the welfare, peace, and happiness of its people. A key component of achieving these benefits is ensuring that citizens have access to high-quality, modern healthcare services. Because companies don't invest in places where high-quality health services and the infrastructure to provide it aren't available (Doeksen, Johnson, Biard-Holmes, & Schott, 1998). This viewpoint is further supported by studies (Lyne, 1988) investigating the relationship between effective healthcare and economic growth. This means that an effective and efficient health sector contributes to the material and moral well-being of citizens, which is a prerequisite for sustainable development. So, the most significant factor for a desired economic development is a contemporary, highly skilled health sector (Berman, 1995). Decision-makers and scientists are now concentrating considerably more on this issue as a result of the COVID-19 pandemic.

From the point of view of management and organization, in order for a sector to be successful, organizations operating in that sector must be effective and efficient. The performance of the employees, often known as human capital in firms, is significant in accomplishing this goal along

with many other factors. As employee performance is closely related to productivity and efficiency (Sarwar, Ketavan, & Butt, 2015). Employee performance can be defined as a way of showing all technical and non-technical skills (such as organizational citizenship) that an employee should exhibit for her/his organization (Williams & Karau, 1991). Employee performance as a dependent variable can be predicted by many independent variables (organizational justice, organizational identification, emotional labor, etc.) such as job satisfaction and smartphone addiction. In this study, it has been investigated how job satisfaction may operate as a mediating in the relationship between smartphone addiction and employee performance in the healthcare industry. Smartphone addiction is the use of a smartphone that negatively impacts a person's every day, social, and professional lives (Alan, Ozen Bekar, & Güngör, 2021) And today, this kind of addiction is really prevalent. The Word "Job satisfaction" is used to measure the pleasure that employees get from their jobs (Aziri, 2011).

First and foremost, this study is unique and original since a similar study hasn't been carried out before in the health sector or any other sector. Therefore, this study will provide both theoretical and practical contributions to the relevant literature and sector. In addition, illustrating the variables that affect the performance of health workers during the pandemic with scientific measurements will create an important awareness on these issues. This will support the development of the health sector in our country and hence support economic growth. Conceptual information on the aforementioned variables will be offered in the study's subsequent sections. Then, the research methodology and associated statistical results will be shared. In the last section, conclusion, discussion and suggestions titles will be included.

1. CONCEPTUAL FRAMEWORK AND HYPOTHESES

This section will include theoretical information on smartphone addiction, employee performance, and job satisfaction. Research hypotheses and important empirical studies addressing the relationship between these variables are also included in this section.

1.1. Smartphone Addiction

Since the 1990s, when mobile phones first entered the lives of the general public, their use has grown steadily. Mobile phones have evolved into smart phones as a result of recent advancements in information technologies. Information technologies have undergone significant changes in sectors like communication and education as a result of factors like the widespread usage of the internet (Tashfeen A. , 2020). People in the digital age use internet-enabled smartphones to conduct all of their financial, educational, travel, and healthcare-related transactions (Ayyagari, Grover, & Purvis, 2011). All of these reasons have led to smartphones being an essential and integral component of modern life. Today, approximately half of the world's population—nearly four billion people—own smartphones (Asit & Batur, 2021). When age, the state of the economy, and a lack of technological literacy are taken into account, this number is quite high. Falling costs, expanding infrastructure services, and the increasing usage of the internet and smart devices are the main causes of this high number (Sarıbay & Durgun, 2020).

Naturally, the widespread and ongoing use of smartphones provides many advantages for people's daily lives (Mengi, Singh, & Gupta, 2020). The advantages of smartphones include the

ability to communicate instantly and visually, spend time on social media, play games, engage in continuing education, conduct financial transactions, and use a variety of practical apps. Smartphones do, however, have certain disadvantages in addition to these advantages. Addiction to smartphones is one of these disadvantages.

The concept of addiction is originally used as a concept specific to medicine and behavioral sciences. In terms of medical science, it means being physically and mentally dependent on a substance (Kim & Kim, 2002). According to behavioral sciences, it is defined as the inability to stop a behavior such as pulling the hair on one's face (Ektiricioğlu, Arslantaş, & Yüksel, 2020). One of the most prevalent addictions in today's society is smartphone addiction. Smartphone addiction means that people spend most of their time online, on social media or using popular applications through these devices. Smartphone addiction is heavily influenced by social networking sites like Instagram, Facebook, and Twitter as well as news portals, gaming, entertainment apps, and internet browsing (Asit & Batur, 2021). According to another definition, smartphone addiction is the excessive and uncontrolled use of this device.

When a smartphone is used more frequently than intended, it becomes a very valuable and necessary item for the user, and when that device is not present, the person feels extremely lacking. The individual's psychological, professional, and social lives are all negatively impacted by this situation, which he/she is aware of yet cannot control (Chen, Zhang, Gong, & Lee, 2019; Al-Shahrani, 2020). Numerous academic disciplines continue to carry out empirical research on the negative effects of smartphone addiction. It is therefore wrong to limit these damages to certain common issues. Nonetheless, smartphone addiction in general;

- ✓ negatively affects students' academic success (Al-Shahrani, 2020),
- ✓ reduces people's personal happiness (Ozen & Topcu, 2017),
- ✓ causes major health issues like brain tumors and abnormalities of the fingers (Gökmen, Gökmen, Dilek, Gülbahar, & Akalın, 2020),
- ✓ leads people to experience unpleasant psychological issues like sadness, restlessness, and anxiety (Mir & Akhtar, 2020),
- ✓ also leads to nomophobia (Yildirim & Correia, 2015),
- ✓ Smartphone addiction negatively affects creative performance and self-regulation (Bilkay & Çiçek, 2022).

The focus of smartphone addiction will be job satisfaction and individual performance in this study.

1.2. Employee Performance

All organizations exist in order to carry out their activities in a sustainable manner and to accomplish the predetermined organizational goals. Employee performance plays a critical role in achieving this. Since employee performance is the term used to describe how employees

contribute to their organizations through their work, abilities, and productivity. Therefore, it is crucial that the employee's performance is in line with the objectives and standards of the company (Sangperm & Jermisittiparsert, 2019).

The employee's job performance demonstrates what she/he contributes to the company she/he works for and how she/he behaves. Employee performance can be thought of as the overall total of an employee's conduct. When an employee does her/his duties effectively and efficiently, she/he offers value to the company she/he works for. Employee's job performance, task performance (production, marketing, purchasing...) consists of the sum of organizational citizenship behavior and counterproductive behaviors (Call & Ployhart, 2021). Since the subject of this study is the job performance of the employee, when we say employee performance, we will mean the job performance of the employee.

The technical abilities that the employee must possess in accordance with the formally established job description are referred to as employee performance. From this point of view, employee performance actually covers all the behaviors that the organization expects from the employee. Some of these tasks (production per hour, the amount of sales made, how many customers they deal with, etc.) can be measured physically, while others (such as organizational citizenship behavior and counterproductive behavior) can only be measured indirectly (Williams & Karau, 1991). According to this, employee performance is the success of an employee in fulfilling the tasks expected from her/his in accordance with the standard job, goals or predetermined criteria during a certain period of time (Juliarti, Agung, & Sudja, 2018).

Employee performance is often used synonymously with productivity and efficiency. From this perspective, employee performance shows how efficient and productive an employee is in all work-related behaviors and work outputs compared to her/his colleagues (Sarwar, Ketavan, & Butt, 2015). Employee performance is thus a crucial factor for every firm seeking to operate effectively and efficiently. Employee performance is affected by many factors such as effective human resources management, organizational citizenship, organizational commitment, organizational climate and organizational justice (Kalay, 2016). Employee performance, as a dependent variable, will be examined together with variables such as smartphone addiction and job satisfaction in this study.

H1: Smartphone addiction affects employee performance.

1.3. Job Satisfaction

Job satisfaction is a concept with different but not contradictory definitions. One definition states that the level of job satisfaction is used to measure an employee's level of job happiness. The concept of job satisfaction also arises if an employee believes that her/his employment satisfies her/his needs. These needs are the average of all material, social and psychological needs (Saari & Judge, 2004). The fulfillment of these demands aids the worker in achieving emotional equilibrium. The perception of satisfaction that occurs in this way also causes positive organizational behaviors such as job commitment (Azeez, Jayeoba, & Adeoye, 2016). Another definition uses the term "job satisfaction" to refer to the feelings that people have regarding their jobs and other facets of their jobs (Spector, 1985). Job satisfaction is also used to indicate how

happy an employee is with her/his job (Laschinger & Finegan, 2005). In other words, the core of job satisfaction is the question of whether the employee is happy in all of her/his job-related expectations and at the end of the job.

It is feasible to describe and explain job satisfaction in all of its dimensions using some theories. These theories are basically the theories developed about motivation. In the related literature, Maslow's hierarchy of needs theory, Herzberg's motivation-hygiene theory and Locke's Affect Theory are frequently used theories to explain job satisfaction. According to Maslow (1943), an individual's motivational needs can be arranged in a hierarchical sequence. The physiological, safety, belonging-love, esteem, and self-actualization requirements can be listed from the bottom to the top of this hierarchy of needs, which is shaped like a pyramid. Accordingly, in order for the person to progress to a higher level, her/his basic needs must be satisfied. (Maslow, 1943). Therefore, for a job to be satisfying, it must meet the individual's needs at that level. According to Herzberg's motivation-hygiene theory, there are two factors that motivate an individual. These are motivators related to the content of the job (motivators) and other factors outside the job but related to the job (hygiene factors). Motivating factors are factors such as success, recognition, and appreciation. Hygiene factors are company policy, salary, supervision, management and similar factors (Fugar, 2007). While motivating factors increase the employee's desire to work, hygiene factors provide job satisfaction of the employee. According to Locke's affect theory, the difference between an employee's expectations and their actual circumstances is what determines whether they are satisfied with their job (Aldhuwaihi, Shee, & Stanton, 2012). If this difference is positive, the employee will be satisfied with her/his job. Otherwise, the employee won't have job satisfaction.

H2: Smartphone addiction affects job satisfaction.

1.4. The Relationship between Smartphone Addiction, Employee Performance, and Job Satisfaction

In this section, the basis of above-mentioned two hypotheses and the remaining ones is examined in the relevant literature. Studies examining the relationship between smartphone addiction and job satisfaction are extremely rare. Studies investigating the relationship between psychological well-being, life satisfaction, and life stress and smartphone addiction haven't been evaluated in this section because they are not relevant to our subject. For example, in an empirical study, a significant and positive relationship has been found between smartphone addiction and job satisfaction. According to this, it has been determined that "as the smartphone addiction levels increase, their job satisfaction levels increase in direct proportion" (Özdemir & Çetiner, 2021, p. 1688). However, in another study investigating the relationship between these two variables, no significant relationship was found between smartphone addiction and job satisfaction (Yılmaz, Yalçın, & Türk, 2020). Since there are few studies investigating the relationship between smartphone addiction and job satisfaction, more researches must be done on this subject.

Although the number of studies investigating the relationship between smartphone addiction and job satisfaction is few, there are many studies investigating the relationship between job satisfaction and employee performance. Workload and organizational justice are only two

examples of the many variables that might affect job satisfaction. Employee performance is one of these important factors. For example, Ramli (2018) has stated that job satisfaction is important in explaining employee performance because there is an important relationship between the two variables. People with high levels of job satisfaction are happier than those with low levels of job satisfaction. This positive mood also affects the high performance of the employees (Khalaf, Hmoud, & Obeidat, 2019). Studies investigating the relationship between job satisfaction and employee performance have proven that job satisfaction increases the productivity of employees and that there is a significant and positive relationship between job satisfaction and employee performance (Sousa-Poza, 2000; Nanda & Browne, 1977; Ali & Farooqi, 2014; Inuwa, 2016; Aziri, 2011; Yorulmaz & Karabacak, 2020). Studies on this subject mostly show that there is a relationship between two variables. However, there are also applied studies in which no relationship was found between the two variables (Crossman & Abou-Zaki, 2003).

Finally, it will be useful to examine the relationship between smartphone addiction and employee performance. However, a comprehensive review of the relevant literature reveals that there are very few studies on this subject. It has been tried, nonetheless, to benefit from some empirical studies. For example, in a study conducted on healthcare employees working in a university hospital, it has been found that there is a negative relationship between smartphone addiction and performance. This has led to the conclusion that having a smartphone addiction causes employees to waste a lot of time, which has a negative impact on their performance (Alan, Ozen Bekar, & Güngör, 2021). Another study in the literature provides support for this finding. This study ("internet" is used instead of smartphone addiction in this study) has found that employees' performance decreases when they waste time on-line (Köse, Oral, & Türesin, 2012).

According to a study that comparatively examined smartphone addiction in South Korea and the USA, it has been shown that smartphone addiction causes employees to neglect their jobs. This affects the performance of the employees (Lee & Shin, 2016). Similarly, a Turkish study has demonstrated that employee performance is negatively impacted by smartphone addiction. As a result, it has been shown that employee performance decreases as smartphone addiction increases (Yılmaz, Yalçın, & Türk, 2020). According to an empirical study that has been published this year and the results of which is so important in terms of the contributions it makes to the literature, the more students become addicted to smartphones the less creative performance they show (Bilkay & Çiçek, 2022). In spite of above-mentioned study results, the assertion that smartphone addiction always has a negative impact on employee performance is untrue. For instance, it has been discovered in a Chinese study that smartphone addiction has no impact on employee performance (Li & Lin, 2018). Therefore, it is more scientific to take these two variables into account together with other mediator or moderator variables. Apart from these studies, numerous other studies (Jamal, Sedie, Haleem, & Hafiz, 2012) have looked into the relationship between students' academic performance and smartphone addiction. The employee performance is the focus of this study; hence detailed investigations haven't been made about those studies.

H3: Job satisfaction affects employee performance.

H4: Job satisfaction has a mediating role in the effect of smartphone addiction on employee performance.

1.5. The Research Model

The model below shows the hypotheses that have been developed based on the purpose of the study.



Figure 1. Research Model

2. THE RESEARCH METHODOLOGY

In this section, there are subjects such as the purpose and boundaries of the research, population and sample, research hypotheses, data collection and analysis method, data analysis and findings.

2.1. The Purpose and Limitations of The Study

The purpose of this study is to ascertain whether job happiness plays a mediating role in the relationship between smartphone addiction and employee performance. For this, first of all, the effect of smartphone addiction on job satisfaction and the effect of job satisfaction on employee performance have been examined. In the relevant literature, there are numerous investigations on these variables. However, no research has been found in the literature that examines the mediating role of job satisfaction in the impact of smartphone addiction on employee performance. Therefore, another aim of this study is to contribute to the relevant literature by filling this important gap.

This study also has its own limitations. The most important limitation is that the research is limited to the health workers within the borders of Adıyaman province. The difficulties of the pandemic period and the intense working conditions of healthcare professionals have negatively affected reaching employees in other provinces. Employees in other regions could not be contacted online at the same time. In addition, cases such as violence against health workers, justified demands of them on issues such as working hours and wages, and death and injury, which they face almost every day, adversely affect the motivation of health workers. It's been observed that under all these difficult conditions, the participants haven't been able to respond to the questionnaire statements carefully and thoughtfully. This is a very important limitation of the study.

2.2. The Population and Sample

The population of the study is all healthcare employees working in different healthcare institutions in Adıyaman. 400 survey forms prepared for this purpose have been distributed to all relevant units by simple random sampling method. However, as stated in the previous paragraph, due to the busy schedule and lack of time, we've only got 250 surveys. 245 surveys have been evaluated after the wrong, unanswered and half-answered surveys have had been removed. The survey form contains 28 statements. This number is deemed adequate for statistical analysis because it is almost eight times as large as the total number of survey statements.

2.3. The Data Collection Tool and Analysis Methods

In this study, a face-to-face survey method has been used to examine the mediating role of job satisfaction in the effect of smartphone addiction on employee performance in healthcare workers working in different healthcare institutions in Adıyaman.

There are ten statements about smartphone addiction in the first section of the survey. The Smartphone Addiction Scale, which was developed by Kwon, Lee, Won, Park, & Min (2013) and adapted into Turkish by Noyan, Darçın, Nurmedov, Yılmaz, & Dilbaz (2015), has been used to measure smartphone addiction. The 5-item short form of the Job Satisfaction Scale, created by Judge et al., (1998), translated into Turkish by Eser & Öngen Bilir (2019), has been used to assess job satisfaction. The scale was first developed by Brayfield and Rothe (1951) and its reliability and validity analysis was done by Eser & Öngen Bilir (2019). Since two statements (3rd and 5th) in the job satisfaction scale are negative, they have been reverse coded in the SPSS program. Employee performance has been assessed using the 9-item Employee Performance Scale developed by Schepers (2008) and translated into Turkish by Özpehlivan (2015). All scales in the survey form consist of one dimension. For convenience in analyzes and prepared tables, smartphone addiction, job satisfaction, and employee performance is abbreviated SPA, JS, and EP, respectively.

Thus, there are a total of 24 statements scaled as likert type (5-point likert). Here, the answers given to the statements are 1- Never, 2- Rarely, 3- Sometimes, 4- Often, and 5- Always. The 4 questions in the last part of the questionnaire have been prepared to measure the demographic characteristics of the participants. Then, the data have been analyzed by transferring them to SPSS 25, Excel and Amos 23 programs.

Before the validity, reliability and factor analysis and the testing of the measurement model and the structural model, the suitability of the scales for factor analysis has been measured. For this, KMO and Bartlett tests have been done. The KMO value is .861 and Bartlett value ($p = .000 < 0.05$) is significant. According to the literature, "KMO test measurement result should be 0.50 and above, and Bartlett sphericity test result should be statistically significant" (Çiçek & Çiçek, 2020). These results demonstrate the suitability of the scales for factor analysis.

2.4. The Analysis of Data and Findings

Regarding the results of the research, the descriptive statistics of the people participating in the surveys and the SEM Path Analysis made to test the hypotheses put forward in the research will be examined and evaluated using tables.

2.4.1. The Descriptive Statistics

This section contains data about descriptive statistics.

Table 1. The Distributions of Descriptive Statistics

Descriptive Statistics		
Personal Information	Frequency	Percentage(%)
The Distribution of Participants by Gender		
Male	154	62,9
Female	91	37,1
Total	245	100
The Distribution of Participants by Age		
18-25	16	6,5
26-35	82	33,5
36-45	92	37,6
46-55	53	21,6
56 and above	2	0,8
Total	245	100
Distribution of Participants by Their Educational Status		
Primary Education	1	0,4
Secondary-High School	40	16,3
Associate Degree	62	25,3
Bachelor degree	126	51,4
Graduate	16	6,5
Total	245	100
The Distribution of Participants by Their Marital Status		
Single	77	31,4
Married	168	68,6
Total	245	100

Table 1 shows that the majority of the participants are male with (62.9%). Furthermore, the 36-45 age range is the highest with 37.6%, and the 56 years and above is the lowest with 0.8%. Considering the educational status, the majority of participants have bachelor's degree (51, 4) and most of them are married (68.6%).

2.4.2. Testing the Measurement Model

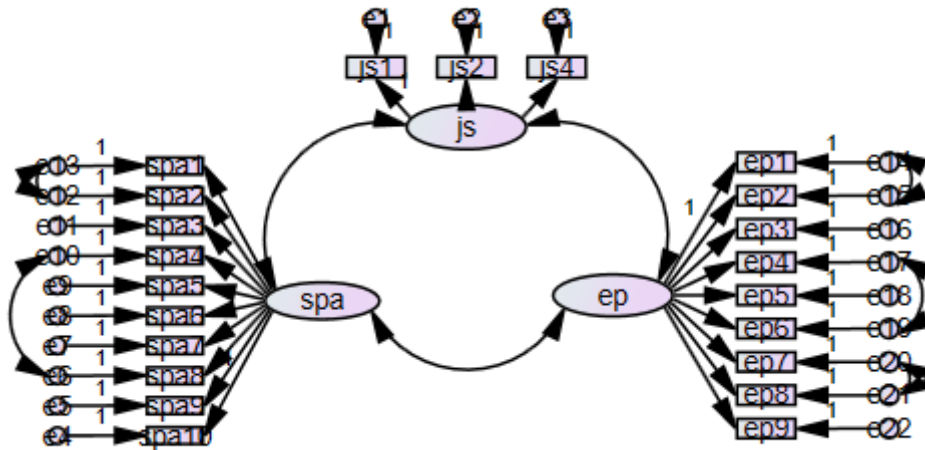


Figure 2. The Measurement Model

Before testing the research hypotheses through the implicit variable structural model, the measurement model consisting of smartphone addiction (10 items), job satisfaction (5 items) and employee performance (9 items) variables has been tested. Due to the normal distribution of the data, the covariance matrix has been created using the Maximum Likelihood calculation method (Şahin & Gürbüz, 2018). Following the analysis, the model has been repeated without the it3 and it5 items because they have low (<0.5) factor loads. As can be seen in Table 2, corrections have been made utilizing high level modification indices and the measurement model have become better. The results are shown in Table 2.

Table 2. The Measurement Model Goodness of Fit Values

Index	Good Fit	Acceptable Fit	Found Values
Cmin/DF	$0 < \chi^2/df < 3$		310,828/201=1,546
CFI	$0,97 \leq CFI \leq 1$	$0,90 \leq CFI \leq 0,97$	0,941
GFI	$0,95 \leq GFI \leq 1$	$0,90 \leq GFI \leq 0,95$	0,900
Rmse	$RMSEA \leq 0,05$	$RMSEA \leq 0,08$	0,047

According to the results in Table 2, CMIN/DF and RMSEA values show good fit, while GFI and CFI values show acceptable fit (Hu & Bentler, 1999).

2.4.3. The Reliability and Validity Analysis

JS3 and JS5 statements have been removed from the scale as a result of the measurement model, and reliability and validity analyses have been subsequently performed. Since "the measuring model is expected to have sufficient validity and reliability prior to testing for a significant relationship in the structural model" (Çiçek & Kılınc, 2020). In this context, Cronbach's α coefficient and AVE (Average Variance Extracted) and CR (Composite Reliability) values for convergent validity have been calculated (Cronbach's α coefficient have been calculated with SPSS program and AVE and CR values have been calculated with Excel program). The results are shown in Table 3.

Table 3. The Reliability and Validity Analysis Results

Scale Expression Groups	Item Number	α	AVE	CR
SPA Dimension	10	0,880	0,42	0,880
JS Dimension	3	0,724	0,47	0,72
EP Dimension	9	0,842	0,373	0,841

When Table 3 is examined, it is observed that the scale questions and research data have medium and high reliability (Kılıç, 2016:48). It is seen that the AVE values of the scales are lower than 0.5. CR values are higher than 0.7. AVE values are required to be higher than 0.5. However, Convergent validity analysis results meet the $CR \geq 0.7$ and $CR > AVE$ condition. (Gözmen Elmas & Aşçı, 2021). In addition, AVE values's being lower than 0.5 isn't a problem in terms of the scientificity of the research, since the Cronbach's α coefficient has medium and high reliability and the goodness of fit values of the measurement model have acceptable and good fits. Since AVE value's being lower than 0.5 is acceptable after $CR \geq 0.7$ and $CR > AVE$ conditions are met (Fornell & Larcker, 1981; Eskiler & Altunışık, 2017; Gözmen Elmas & Aşçı, 2021).

2.4.4. Testing the Structural Model and Research Hypotheses

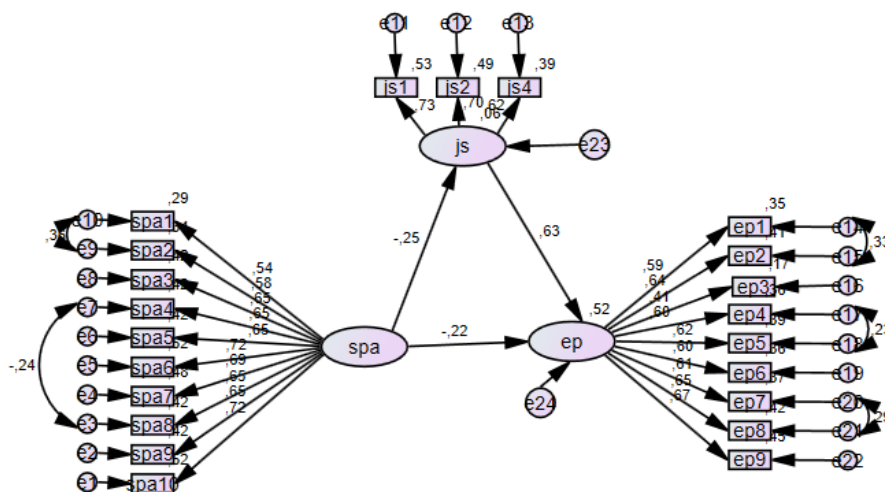


Figure 3. The Structural Model

After the verification of the measurement model, the research hypotheses have been tested on the implicit variable structural model. Analysis results are presented in Table 4.

Table 4. Testing Hypotheses with the Structural Equation Model

Prediction Variables	Result Variables			
	Job Satisfaction		Employee Performance	
	β	SE	β	SE
H1(spa→ep)	-	-	-0,38***	0,071
R ²	-	-	0,15	
H2(spa→js)	-0,28***	0,072		
R ²	0,08			
H3(js→ep)			0,635***	0,086
R ²			0,52	
H4(spa→js→ep)				
spa→ep (path c)	-		-0,22**	0,060
js→ep (path b)	-		0,635***	0,086
R ²			0,52	
Indirect Effect				
(spa→js→ep)	-		-0,160,	(-0,290,-0,042)

Note: *p< ,05; **p< ,01; ***p< ,001. Values in parentheses are lower and upper confidence intervals. Bootstrap resampling=2000.

First, H1 (smartphone addiction → employee performance) has been tested and it has been found that smartphone addiction predicts employee performance ($\beta=-0.38$; $p<0.01$) and the p value is significant (negative effect). The goodness of fit values is as follows: Cmin/df=1.92, CFI=0.90, GFI=0.881 and RMSEA=0.061 (Cmin/df is at good level, CFI and RMSEA are at acceptable levels, and GFI is very close to the acceptable level). In this case, H1 is accepted. Afterwards, H2 (smartphone addiction → job satisfaction) has been tested. According to the test results, smartphone addiction affects job satisfaction (negative effect) and the p value is significant ($\beta=-0.28$; $p<0.01$). In this case, H2 is also accepted. After the second test, the goodness of fit values is as follows: Cmin/df=1.865, CFI=0.907, GFI=0.884, and RMSEA=0.06 (Cmin/df is good, CFI and RMSEA are acceptable, and GFI is very close to the acceptable level). In the second analysis, it is seen that the goodness-of-fit values improves. In addition, after the second analysis, $\beta= -.40$ and $R^2= .16$ in the spa→ep effect.

In order to test the other hypotheses of the research, a separate model in which job satisfaction is the mediating variable has been established. Accordingly, the effect of job satisfaction, which is a mediating variable, on employee performance ($\beta=0.635$; $p< .001$) is

significant. In this case, H3 (job satisfaction → employee performance) has also been supported. The goodness of fit values is as follows: $Cmin/df=1.53$, $CFI=0.943$, $GFI=0.90$, and $RMSEA=0.47$ (all values turned out to be good and acceptable). In addition, $\beta= -.28$ in the $spa \rightarrow ep$ effect and $\beta= -.38$ in the $js \rightarrow ep$ effect. However, with the inclusion of the mediating variable job satisfaction in the model, the path coefficient from smartphone addiction to employee performance is still significant ($\beta= -0.22$; $p < .01$). However, the path coefficient (β), which was -0.38 in H1, decreased to -0.22 after the mediator variable was included in the model. In this case, a partial mediation role emerges. In other words, job satisfaction has a partial mediating role in the effect of smartphone addiction on employee performance. Job satisfaction explains 52% of the variation (variance) in employee performance with smartphone addiction. The fact that the fit indices obtained as a result of the path analysis are good and at an acceptable level ($Cmin/df=1.53$, $CFI=0.943$, $GFI=0.90$ and $RMSEA=0.47$) show that the model is compatible with the data. According to Bootstrap results, it has been determined that the indirect effect of smartphone addiction on employee performance through job satisfaction is significant ($\beta= -0.160$, Confidence Interval= 95%, Lower and Upper Confidence Limits= -0.290 , -0.042). These results prove that the job satisfaction variable has a partial mediating role in the effect of smartphone addiction on employee performance. Accordingly, H4 has been accepted.

CONCLUSION AND RECOMMENDATIONS

Four hypotheses have been developed in accordance with the model that have had been developed using the variables of smartphone addiction, employee performance, and job satisfaction in this study. Accordingly, it has been investigated whether job satisfaction has a mediating role in the effect of smartphone addiction on employee performance. In the relevant literature, empirical studies using these three variables have been examined in detail (detailed information about these studies is given in the conceptual framework section) and a model with a strong scientific basis has been constructed. The assumptions of the model tested with four hypotheses are as follows: Smartphone addiction significantly affects employee performance. Smartphone addiction significantly affects job satisfaction. Job satisfaction significantly affects employee performance. Finally, job satisfaction has a mediating role in the effect of smartphone addiction on employee performance. In this study conducted on healthcare workers, there are scale expressions developed to measure three variables and demographic expressions that investigate the personal information of the participants. Research data have been analyzed using Spss, Amos and Excel programs. According to the answers given to the demographic statements, the participants are mostly male, middle-aged (36-45) and young (26-35), married and have bachelor's degree.

Then, KMO and Bartlett tests have been performed to measure whether the scales are suitable for factor analysis and the results show that they are. In the structural equation model, a measurement model must be established and tested before the structural model can be tested. For this purpose, the measurement model has been tested and according to the results of this test, js3 and js5 items have been excluded from the model as they have low factor loads. After these items have been removed and the necessary modifications have been made, the goodness of fit values of the measurement model is acceptable and shows good fit. Standardized factor loads

obtained from the measurement model have been transferred to the Excel program and AVE and CR values have been calculated for convergent validity. Accordingly, $CR \geq 0.7$ and $CR > AVE$ conditions are met. In order to calculate the reliability of the scales, Cronbach's α coefficient of the scales have been checked with Spss and the results show that the scales have medium and high reliability.

In the last part, the hypotheses of the research have been tested with the structural model. Accordingly, smartphone addiction affects employee performance (H1 is accepted). This effect is negative and significant. In other words, as smartphone addiction among healthcare professionals grows, so does their performance or it might be claimed that those with high performance are less dependent on smartphones. These results are consistent with the results of previous studies in the literature (Alan, Ozen Bekar, & Güngör, 2021). In the next step, it has been determined that smartphone addiction affects job satisfaction negatively and significantly (H2 is accepted). According to this, it can be concluded that employee job satisfaction declines as smart phone addiction increases. Contrary to this study, a study investigating the effects of smartphone addiction on job satisfaction found a positive relationship between smartphone addiction and job satisfaction (Özdemir & Çetiner, 2021). Another study found a meaningless relationship between the two variables (Yılmaz, Yalçın, & Türk, 2020).

Beside the above-mentioned results, it has been determined that job satisfaction affects employee performance positively and significantly (H3 is accepted). In other words, as job satisfaction increases, employee performance increases. The acceptance of this hypothesis is in parallel with the research results in the literature (Ramli, 2018). Finally, when job satisfaction has been included in the model as a variable, the effect of smartphone addiction on employee performance diminishes, but the relationship is still significant. In this case, it can be said that job satisfaction has a partial mediator role in the effect of smartphone addiction on employee performance (H4 is accepted). The indirect impact of smartphone addiction on employee performance through job satisfaction is significant based on Bootstrap results. There is no study investigating the mediating role of job satisfaction in the effect of smartphone addiction on employee performance in the relevant literature so this study is unique in this regard. For this reason, the assumption of H4 hasn't been compared with the results of any other study.

These findings close a significant gap in the organizational behavior literature. Because, in the relevant literature, there are empirical studies investigating the effects of smartphone addiction on job satisfaction and employee performance, and the effects of job satisfaction on employee performance. However, no study investigating the mediating role of job satisfaction in the effect of smartphone addiction on employee performance has been found. Therefore this study offers crucial information to sector managers as well as academics researching this topic. First of all, scientists who do research on this subject can retest the model, which is constructed in this research and supported by statistical data, in different sectors and populations. In addition, health sector managers can increase efficiency and productivity in their own sectors in the light of these results. Especially difficult periods such as the COVID-19 pandemic make the heavy working conditions of healthcare professionals even more unbearable. Low employee performance and job satisfaction, like in all organizations, cause low productivity in the health sector. A country's

insufficient healthcare infrastructure, as explained in the introduction section, is a significant barrier to its ability to advance economically. Smartphone addiction is an important independent variable that causes low performance and job satisfaction in health sector (of course, it is not possible to say that it is the only factor). Therefore, addressing smartphone addiction appropriately at crucial in-house meetings and training programs and spreading awareness of this issue will have a positive impact on both sector managers and employees.

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