

Perception Of Individuals Who Study In The Field Of Health Sciences Regarding The Concept Of Addiction: A Metaphor Analysis

Ali YILMAZ* Nesrin AKCA** Pınar ÖKE KARAKAYA*** Seda SÖNMEZ****

Geliş Tarihi (Received): 11.11.2019 – Kabul Tarihi (Accepted): 11.05.2020

Abstract

The aim of this study is to examine the perceptions of university students in the field of health sciences on the concept of "addiction" with metaphor analysis. Phenomenology design, which is one of the qualitative research designs, was used in the study. The metaphoric perceptions of 283 students in the study on addiction were collected through a semi-structured interview form and evaluated by content analysis. As a result of the analysis, it was seen that the metaphoric perceptions of the students about the concept of addiction were divided into four categories as harm, support, and need, lack of will and difficulty of control. It was found that the students' perceptions about the concept of addiction were mostly in the category of "difficulty of control". However, it was found that the students who thought that they had addictions perceived it as "support and need" mostly. It is thought that the results obtained from this study will lead to addiction prevention activities, especially in the age group of 18-25 within the risk group.

Keywords: Addiction, substance addiction, behavioral dependence, metaphor analysis, university students

*Dr. Öğr. Üyesi, Kırıkkale Üniversitesi Sağlık Bilimleri Fakültesi Sağlık Yönetimi Bölümü, aly@kku.edu.tr

** Dr. Öğr. Üyesi, Kırıkkale Üniversitesi Sağlık Bilimleri Fakültesi Sağlık Yönetimi Bölümü, nakca@kku.edu.tr

*** Arş.Gör., Kırıkkale Üniversitesi Sağlık Bilimleri Fakültesi Sağlık Yönetimi Bölümü, pinaroke@kku.edu.tr

**** Arş.Gör., Kırıkkale Üniversitesi Sağlık Bilimleri Fakültesi Sağlık Yönetimi Bölümü, sedakaya@kku.edu.tr

Sağlık Bilimleri Alanında Öğrenim Gören Bireylerin Bağımlılık Kavramına İlişkin Algıları: Bir Metafor Analizi

Öz

Bu çalışmada sağlık bilimleri alanında öğrenim gören üniversite öğrencilerinin “bağımlılık” kavramına ilişkin algılarını metafor analizi ile incelemek amaçlanmıştır. Araştırmada nitel araştırma desenlerinden fenomenoloji deseni kullanılmıştır. Çalışmada yer alan 283 öğrencinin bağımlılık kavramına ilişkin metaforik algıları yarı yapılandırılmış bir görüşme formu aracılığıyla toplanmış ve içerik analizi ile değerlendirilmiştir. Analiz sonucunda öğrencilerin bağımlılık kavramına ilişkin metaforik algılarının zarar verici, destek ve ihtiyaç, irade yoksunluğu ve kontrol güçlüğü olmak üzere dört kategoride toplandığı görülmüştür. Öğrencilerin bağımlılık kavramı ile ilgili algılarının en çok “kontrol güçlüğü” kategorisinde yer aldığı bulunmuştur. Bununla birlikte bir bağımlılığı olduğunu düşünen öğrencilerin bağımlılığı en çok “destek ve ihtiyaç” olarak algıladıkları tespit edilmiştir. Bu çalışmadan elde edilen sonuçların özellikle riskli grupta yer alan 18-25 yaş arası bireylerde bağımlılığı önleyici faaliyetlere yol göstereceği düşünülmektedir.

Anahtar Kelimeler: Bağımlılık, madde bağımlılığı, davranışsal bağımlılık, metafor analizi, üniversite öğrencileri

Introduction

Addiction which is defined as "Addiction Syndrome" in ICD10 as a psychiatric syndrome is a set of physiological, behavioral and cognitive phenomena that manifest by the desire to use psychoactive drugs, alcohol or tobacco. A strong desire and a sense of coercion to use the substance, an increase in the amount of substance use, withdrawal symptoms when not using, to continue the use of substances despite clearly noticeable destructive effects are reported as diagnostic criteria for addiction syndrome (WHO, 2019).

According to the World Health Organization's (WHO) data for 2016; it is known that 275 million people use illicit drugs such as cannabis, amphetamines, opioids and cocaine in the world, approximately 31 million people suffer from substance-related diseases and 3.3 million people die due to heavy use of alcohol. From 2010 to 2015 alone, deaths directly related to substance use increased by 60%. Substance use is common in men, but women tend to consume other addictive substances such as alcohol and cocaine, and this leads to a rapid development of substance-related diseases (World Drug Report, 2018). In parallel manner, the studies carried out in Turkey, it was determined that substance abuse is at a higher rate in men than in women (Horzum, 2011; Sahin et al., 2000), and more than three-quarters of cases were multiple substance users (Yüncü et al., 2006). When the world is examined, it is seen that substance use is higher among young people than the elderly. Adolescent period is the most risky period to start substance use and 18-25 age group is the most prevalent group in terms of substance use. Although it varies according to the social and economic conditions of the countries, substance use is seen in two types as recreational and coping with difficulties (World Drug Report, 2018).

Although addiction is often considered within the scope of substance addiction, some transformations in recent years have brought behavioral addictions. For this reason, gambling, eating disorders, sleep disorders, sexual dependencies, and so on. Addictions not based on substance use were also included in the latest versions of the American Psychological Association Diagnostic and Statistical Manual of Mental Disorders (DSM, 2012). Today, the development of technology has revealed concepts such as internet, telephone, online game addiction. Although such addictions have been frequently mentioned recently, Young (1998) stated that internet addiction is a type of impulse control disorder similar to the pathological structure of gambling behavior. Although substance addiction has been an issue that has been discussed for many years, behavioral addictions have increased rapidly and become a problem that attracts attention. For example, Köseliören (2017) found that more than one third of the participants were at risk of having online game addiction in a study conducted with high school students. Yılmaz et al. (2014) have stated that 16% of the high school students making up the sample are addicted to the internet at high levels. Günüç and Kayri (2010) found internet addiction in 10% of the participants in their studies with similar age groups and stated that this rate was higher than the rates determined in studies conducted in different countries.

Despite the fact that substance addiction and behavioral addictions are approached from different frames, Griffiths (2009) has ascertained that criteria such as building tolerance, mood swings, withdrawal symptoms which are seen in substance addiction are also seen in behavioral addictions and stated that all addictions are part of a biopsychosocial process and have a common etiology.

Lack of social support of the individual, lack of self-confidence, presence of substance-using individuals within the family (Turhan et al. 2011); inter-family problems (Karaca, 2010); some personal features such as neuroticism and adaptation (Tang, 2016); negative beliefs which the individual develops during childhood and adolescence period (early schemas) (Soyaslan and Özcan, 2019); genetic susceptibility (Crabbe, 2002) are some of the factors which have been confirmed to have relation with addiction and trigger addiction.

When the literature is analyzed, it's seen that there are multiple factors that affect the development of addiction. For this reason, Swendsen and Moal (2011) have particularly stated that biologic, psychologic and social factors affect each other and they can't be evaluated independently.

The consequences of addiction vary as well as its causes. The effects / consequences of addiction are examined under two headings as physical and social effects in general.

Destruction of the nervous system, fatal damage in all systems, particularly in the digestion and respiration, are considered as physical effects. Separation of the individual from social life due to his dependencies and being dragged into depression and loneliness are within the scope of social effects (Sargin, 2011). All these devastating effects have serious consequences for both the individual and the society.

Being able to understand the emergence and development process of the addiction phenomenon is possible by comprehending the meaning that individuals attribute to the concept of "addiction". For this purpose, in this study, it is aimed to reveal the metaphoric perceptions of university students who are in the age group of potential risk of dependency.

1. Methods

1.1. Purposes of the Research

It is known that some habits acquired in order to overcome the conditions that may cause stress on university students, such as being in a period of adulthood, getting a profession and finding a job, and making them a risky group in terms of substance addiction. On the other hand, reasons such as the increase in access to the Internet recently and the importance of the internet in their daily lives indicate that university students should be evaluated in terms of some behavioral addictions. The most effective way to understand how addiction occurs and develops is to research the meaning that students attach to the concept of addiction. Therefore in this study, it is aimed to determine the perception of university students studying in the field of health sciences on the concept of "addiction" by means of metaphors. To this end, the following questions were sought: (i) With what metaphors do university students studying in the health sciences explain their perception of addiction? (ii) Under which categories are these metaphors expressed? (iii) Do the categories regarding to metaphors differ according to the individual characteristics of the students?

1.2. Research Model

This research was carried out according to phenomenology (qualitative) design which is one of the qualitative research designs. In phenomenological researches, expressing and evaluating a concept as a phenomenon depends on the participant's position, experience and point of view. Therefore, in this research model, subjective perception of the participant regarding the related concept is taken into consideration

(Willig, 2013). In this study, perceptions of students about the concept of addiction are examined through metaphors.

1.3. Research Group

322 undergraduate students studying in the field of health sciences at a state university participated in this research which was conducted between April-June 2019. The reason for the research to be conducted especially in the age group of 18-25 and on the students studying in the health sciences is due to the fact that the individuals in question are in the risk group in addiction epidemiology and they will be an example for the society when they start their career and will play an important role in improving the health status of individuals. A list was formed for the metaphors that the students expressed and the research was conducted on the data of 283 students as a result of elimination of the papers which lacks metaphors or reasons. In the data not included, students left the metaphor or reason completely blank. Participation was based on volunteering.

1.4. Data Collection

A semi-structured questionnaire consisting of two parts was prepared to evaluate the perceptions of the students partaking in the research on the concept of addiction. In the first part, individual characteristics of the students such as their gender, the department they attend, whether they have any addictions, whether there is an addict in the family and whether they have any education about addiction were asked.

In the second part, students were asked to complete the sentence “*Addiction is like.... Because...*” in order to evaluate their perception regarding the addiction concept. Yıldırım and Şimşek (2013) state that metaphor alone is not sufficient in metaphor analysis studies, therefore, the question of “why” should be asked following the metaphor. Thus, the reason why students perceive the metaphors they stated about the concept of addiction like that would be revealed.

1.5. Data Analysis

Content analysis was utilized in the evaluation of the collected data in accordance with the purpose of the research. The main purpose of this analysis method is to determine the order, frequency, relationship of the basic concepts in the qualitative data collected and a systematic coding and categorization approach in order to define and explain this data. (Vaismoradi et al., 2013). The studies using metaphor analysis are examined in the literature, it was seen that some stages were followed in the analysis of the data (Saban et al., 2007; Nikitina & Furuoka, 2008; Özbaş & Aktekin, 2013; Karaçam & Aydın, 2014; Yılmaz et al., 2020). These stages are naming, elimination, category development, validity and reliability, and transferring to the computer environment. In this study, these stages were followed and explained in detail below.

Firstly, the metaphors and the reasons stated by the students are listed and the papers whose metaphor or justification is missing are excluded from the evaluation. Accordingly, it was decided to analyze 283 papers by eliminating 39 papers out of 322 papers. After the elimination of the papers, the metaphors stated by the students were listed in alphabetical order and the sample metaphors thought to represent each metaphor were identified and categorized. The categories were developed according to the characteristics of the students by means of the metaphors and their reasons related to the concept of addiction and a total of 4 categories were obtained. The validity and reliability

of the research are of great importance in terms of the design of the research, the analysis of the data, the interpretation of the findings and the demonstration of the quality of the research (Golafshani, 2003). In order to ensure the validity of this research, the stages of collection, analysis and interpretation of the data are described in detail and are interpreted in the findings section by giving examples of metaphors that are thought to best represent the categories (Yıldırım & Şimşek, 2013). In qualitative research, it is recommended that the data set be encoded by more than one researcher in order to eliminate the individual effects that may occur during the coding of the data (Creswell, 2013). In this study, the data were coded separately by the researchers and calculated according to the reliability coefficient of Miles and Huberman (1994) [$\text{Consensus number} / (\text{Consensus number} + \text{Disagreement number} * 100)$] and the reliability coefficient was found to be 96%. According to Miles and Huberman (1994), when this value is higher than 80%, it indicates that the reliability of the research is ensured.

Finally, after transferring to the computer environment, all these data were analyzed by using descriptive statistics in SPSS program and presented in the findings.

2. Results

The categories and the examples of the metaphors belonging to these categories in consequence of the study were explained and interpreted. In addition, the metaphors which the students expressed according to their individual characteristics were evaluated by comparing.

Table 1. Determined Categories Related to the Concept of Addiction

Categories	Metaphor Examples	Numbers of Metaphors	n	(%)
Addiction as a supportive and needed element	Life jacket, glasses, shelter, oxygen, bread....	48	78	27,60
Addiction as an element which is difficult to control	Swamp, prison, chain, swirl, handcuffs, pit....	63	115	40,60
Addiction as an element of lack of will	Shackles, blinkers, ink stain, open wound....	29	34	12,00
Addiction as a harmful element	Scorpion, plague, poison, parasite, snake....	43	56	19,80

When Table 1 is examined, it is seen that the metaphors expressed by the students are grouped into 4 categories. It was found that the students mostly perceived the concept of addiction as an element which is difficult to control. Metaphors for these categories and examples of their reasons are presented below.

Category 1: Addiction as a supportive and needed element

In this category, it is seen that the students perceived addiction as a support or a needed element. Accordingly, it can be stated that addiction is perceived as a positive element. Some of the expressions related to this category are as follows:

“Addiction is like a life jacket. Because you have to hold on to it to live. (Ex.16)

“Addiction is like glasses. Because even if it restricts your freedom, you cannot enjoy living without it. (Ex.28)

“Addiction is like gravity. Because it connects man to the world. (Ex.131)

“Addiction is like eating. Because you feel it is mandatory to live. (Ex.225)

“Addiction is like a shelter. Because you can feel relaxed and safe only there. (Ex.44)

Category 2: Addiction as an element which is difficult to control

In this category, students perceive addiction as an element which is too difficult to control. Here, it is seen that addiction is perceived as an element which exists against the individual’s own will, and out of the individual’s control and is negative. It is thought that once a person has become addicted, he or she cannot get rid of it. The statements of the students related to this category are given below.

“Addiction is like fire. Because even if you want to escape, it will surely find you. (Ex.81)

“Addiction is like a prison. Because once you get in, you cannot get out. (Ex.101)

“Addiction is like a swirl. Because it is impossible to get out once you get caught by it. (Ex.119)

“Addiction is like a swamp. Because once you sink, you sink deeper the more you try to escape. (Ex.35)

“Addiction is like a plant in the desert. Because it wraps all around you to find water. (Ex.133)

Category 3: Addiction as an element of lack of will

In this category, it is seen that the students perceive the concept of addiction as an element that is in the hands of the individual but arises due to lack of will. It is thought that if the person makes an effort, he or she can get rid of addiction. It is expressed as a negative element and some examples are as follow:

“Addiction is like space. Because if you fill in, you'll see it disappears.” (Ex.145)

“Dependency is like an ink stain. Because when it spreads, it can spread everywhere, but it can be cleaned. (Ex.128)

“Addiction is like handcuffs. Because if you don't want to survive, you will continue to live with it. (Ex.45)

“Addiction is like a bottomless well. Because it may seem impossible, but there is always light at the end of the well.” (Ex.23)

Category 4: Addiction as a harmful element

In this category, students perceive addiction as a harmful element. Addiction here is a harmful and negative element for the individual. The following statements are given as examples.

“Addiction is like insects on the root of the flower. Because it kills people slowly.” (Ex.75)

“Addiction is like an unfounded building. Because it collapses after a while.” (Ex.155)

“Addiction is like a plague. Because it rots both the soul and the body of man. Ex (Ex.10)

“Addiction is like dynamite. Because it destroys human life.” (Ex.210)

Table 2. Students' Perceptions of Addiction by Their Individual Characteristics

Individual Characteristics	n	Categories Regarding Addictions			
		1	2	3	4
<u>Gender</u>					
Female	215	%25,10	%42,80	%12,60	%19,50
Male	68	%35,30	%33,80	%10,30	%20,60
<u>Perception of Addiction</u>					
Available	87	%42,50	%28,70	%14,90	%13,80
Unavailable	196	%20,90	%45,90	%10,70	%22,40
<u>Addiction Type</u>					
Behavioral	47	%36,20	%31,90	%19,10	%12,80
Substance	32	%46,90	%28,10	%9,40	%15,60
Both	8	%71,40	%14,30	%14,30	%0
<u>Perception of Addiction within the Family</u>					
Available	129	%23,30	%40,30	%11,60	%24,80
Unavailable	154	%31,40	%40,50	%12,40	%15,70
<u>Addiction Training</u>					
Trained	184	%31,10	%41,30	%9,20	%18,50
Untrained	99	%21,20	%39,40	%17,20	%22,20

Table 2 shows the distribution of the categories formed by the students' perceptions of addiction according to their individual characteristics. When the table was examined, it was found that female students perceived addiction as the most difficult element to control, whereas male students defined it as the most supportive and needed element. The students were asked if they thought they had any addiction in the questionnaire and a large part of the students stated that they did not think that they have any addiction. It was determined that the students who thought that they had an addiction were perceived the addiction as the most supportive and needed item, whereas the students who thought that they had no addiction perceived the addiction as a difficult element to control. The students who thought that they had an addiction were asked what kind of addiction they think they had and it was seen that most of the students stated that they had a behavioral addiction. It was found that the students who thought that they had behavioral, substance and both substance and behavioral addictions were perceived the addiction to be the most supportive and needed element. On the other hand, it was determined that the students who thought that they had behavioral and both behavioral and substance addictions perceived the addiction as the least harmful element and the students who thought that they had substance addiction perceived the addiction at least

as an element of lack of will. The students were asked if they thought that there was a addicted individual in their family members and most of the students stated that they thought they were not addicted. According to this, it was seen that the students who think and do not think that there is a dependent person in the family members mostly perceived the addiction as an element too difficult to control. Finally, the students were asked whether they had an addiction training or not, and it was seen that most of the students received a training on this subject. It has been found that both the educated and non-educated students perceived the addiction as a difficult element to control.

3. Discussion

In this study, it is aimed to investigate the perception of addiction concept of university students studying in the field of health sciences through metaphor analysis. As a result of the study, students' perceptions about addiction has seen to be divided into four categories as supportive and needed, difficult to control, based on lack of will and as an harmful element. In general, it was found that students most perceived addiction as an element “too difficult to control” and least perceived as an element of “lack of will”. As Pickard et al. (2015), addiction studies hold the addicts responsible for their situations and has been polarized into two views one of which there is a moral failure and the other is that addiction is a neurobiological brain disease. Even though the second opinion has increased its popularity recently, as Marmot and Wilkonson (2009) have emphasized in all aspects of subjects regarding health; the phenomenon of addiction should be handled together with social and cultural determinants. For this reason, the specified categories related to the student’s perception of addiction and their individual characteristics were also mutually evaluated. It was found that female students most perceived addiction as an element too difficult to control, whereas male students most defined it as a supportive and needed element.

As stated in the World Drug Report (2018), this result is thought to be one of the reasons why addiction is more common in men than women in the world. The fact that the majority of male respondents see addiction as a supportive and needed element in their lives poses a risk in the long run. In the study, participants were asked whether they considered themselves as individuals with addiction or not. According to this, it was determined that the students who think that they have an addiction perceived it as the most supportive and needed element, but the students who think that they have no addiction perceived it as an element too difficult to control. It is thought that the students who think that they are addicts can see the addiction as a supportive and needed element, and that the behavior or substance that is subject to addiction has a reward effect in the perception of individuals (positive reinforcement). Because the beginning of addiction is based on positive reinforcements (Wise and Koob, 2014). Gyuro (2016), in his study with substance addicts, showed that some of the addicts conceptualize the drugs they depend on with slang words and explain the substances in question with happiness metaphors. Having positive metaphors against narcotic drugs for a drug addict shows parallelism with the perception of participants’ of our study who perceive the addiction as a supportive and needed element and signifies the course of addiction level. It was seen that most of the students in the study stated that they had a behavioral addiction, but it was also seen that number of the students who thought that they had a substance addiction were in majority. Similarly, students who think that they have behavioral, substance or both addictions most perceived the addiction as the most supportive and needed element. Even though substance addiction has been discussed for a long time,

behavioral addiction is a relatively new topic. So much so that behavioral addictions took place much later than substance addictions in DSM. Therefore, while individuals are more familiar with the diagnostic criteria for substance addiction, the same interpretation cannot be made regarding the awareness of behavioral addiction criteria. For this reason, individuals can easily include themselves in the class of behavioral addictions such as shopping addicts and internet addicts. In addition, it was seen that the students' perceptions about whether they had a dependent person in their family and whether they had any education about addiction were similar and they most perceived addiction as an element too difficult to control. In-depth interviews revealing the reasons why addiction is perceived as an element too difficult to control is recommended for future studies. In this study, perceptions of individuals between the ages of 18-25, which are a risky addictive group, about the concept of addiction were revealed through metaphors. The fact that addiction is perceived as too difficult to control in the perception of individuals suggests the lack of information on the subject. One of the basic steps in combating addiction can be seen as the regulation of educational contents in terms of behavioral addictions without focusing merely on substance addiction and reviewing the materials that shape the perception of addiction in the media. In health institutions, increasing the number of polyclinics for the diagnosis and treatment of behavioral addictions and the implementation and research centers for combating addiction in higher education institutions should be supported. In addition, in order to raise awareness of individuals in the risk group, it is considered that increasing the projects in cooperation with educational institutions, health institutions and non-governmental organizations operating in this field, especially Yeşilay, will contribute to the process.

References

- Crabbe, J.C. (2002). Genetic contributions to addiction. *Annu. Rev. Psychol.* 53, 435–462.
- Creswell, J. W. (2013). Nitel araştırma yöntemleri beş yaklaşıma göre nitel araştırma ve araştırma deseni (M. Bütün & SB Demir, Çev.) Ankara: Siyasal Kitabevi.
- DSM (Diagnostic and Statistical Manual V), (2012). Mental Disorders, The Committee on Nomenclature and Statistics of the American Psychiatric Association, Washington, pp. 947
- Golafshani, N. (2003). Understanding Reliability and Validity in Qualitative Research, *The Qualitative Report*, 8 (4), 597-606.
- Griffiths, M. (2005). A 'components' model of addiction within a biopsychosocial framework. *Journal of Substance Use*, 10(4), 191-197.
- Günüç, S., & Kayri, M. (2010). Türkiye'de internet bağımlılık profili ve internet bağımlılık ölçeğinin geliştirilmesi: Geçerlik-güvenirlik çalışması. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, 39(39), 220-232.
- Gyuro, M. (2016). Conceptualizing the metaphors of drug abusers. *Topics in Linguistics*, 17(1), 81-91.
- Horzum, M. B. (2011). İlköğretim öğrencilerinin bilgisayar oyunu bağımlılık düzeylerinin çeşitli değişkenlere göre incelenmesi. *Eğitim ve Bilim*, 36(159), 56-68.
- Karaca, İ. (2010). Aile içi iletişimin ortaöğretim öğrencilerinin madde bağımlılığına etkisi: Elâzığ ili örneği (Yüksek Lisans Tezi, Fırat Üniversitesi, Sosyal Bilimler Enstitüsü, Elâzığ). Retrieved from: <https://tez.yok.gov.tr/UlusalTezMerkezi/>

- Karaçam, S., & Aydın, F. (2014). Ortaokul Öğrencilerinin Teknoloji Kavramına İlişkin Algılarının Metafor Analizi. *Gaziantep University Journal of Social Sciences*, 13(2), 545-572.
- Köseliören, M. (2017) İnternet, Online Oyun ve Bağımlılık (Yüksek Lisans Tezi, Selçuk Üniversitesi, Sosyal Bilimler Enstitüsü, Konya). Retrieved from: <https://tez.yok.gov.tr/UlusalTezMerkezi/>
- Marmot, M. & Wilkinson R.G. (2009). Sağlıkın Sosyal Belirleyicileri, İNSEV Yayınları: İstanbul.
- Miles, M. B. & Huberman, A. M. (1994). *Qualitative Data Analysis: An Expanded Sourcebook*, SAGE Publications: USA.
- Nikitina, L., & Furuoka, F. (2008). " A Language Teacher is Like...": Examining Malaysian Students' Perceptions of Language Teachers through Metaphor Analysis. *Online Submission*, 5(2), 192-205.
- Özbaşı, B. Ç., & Aktekin, S. (2013). Tarih öğretmen adaylarının tarih öğretmenliğine ilişkin inançlarının metafor analizi yoluyla incelenmesi. *Eğitimde kuram ve uygulama*, 9(3), 211-228.
- Pickard, H., Ahmed, S. H., & Foddy, B. (2015). Alternative models of addiction. *Frontiers in psychiatry*, 6, 20.
- Saban, A., Kocbeker, B. N., & Saban, A. (2007). Prospective teachers' conceptions of teaching and learning revealed through metaphor analysis. *Learning and instruction*, 17(2), 123-139.
- Sargın, N. (2011). Gençlerde ve Çocuklarda Madde Bağımlılığı. *Eğitime İlişkin Çeşitlemeler*, 26, 55.
- Soyaslan, B. D., & Özcan, C. T. (2019). Madde kullanım bozukluğu olan kişilerde erken dönem uyumsuz şemalar ile öfke düzeyleri arasındaki ilişkinin incelenmesi, *J Psychiatric Nurs*, 10(2), 117-123.
- Swendsen, J., & Le Moal, M. (2011). Individual vulnerability to addiction. *Annals of the New York Academy of Sciences*, 1216(1), 73-85.
- Şahin, Ü., Öztürk, M., Ünlü, M., Uşkun, E., & Akkaya, A. (2000). Üniversite öğrencilerinin sigara kullanım ve bağımlılık düzeylerini etkileyen faktörlerin irdelenmesi. *Türkiye Klinikleri Archives of Lung*, 1(2), 1-5.
- Tang, J. H., Chen, M. C., Yang, C. Y., Chung, T. Y., & Lee, Y. A. (2016). Personality traits, interpersonal relationships, online social support, and Facebook addiction. *Telematics and Informatics*, 33(1), 102-108.
- Turhan, E., İnandı, T., Özer, C., & Akoğlu, S. (2011). Üniversite öğrencilerinde madde kullanımı, şiddet ve bazı psikolojik özellikler. *Türkiye Halk Sağlığı Dergisi*, 9(1), 33-44.
- Vaismoradi, M., Turunen, H., & Bondas, T. (2013). Content analysis and thematic analysis: Implications for conducting a qualitative descriptive study. *Nursing & health sciences*, 15(3), 398-405.
- WHO. (2019). https://www.who.int/substance_abuse/terminology/definition1/en/. Accessed on: 11.09.2019
- Willig, C. (2013). *Introducing Qualitative Research in Psychology*. UK: McGrawHill Education.
- Wise, R.A., & Koob, G.F. (2014). The development and maintenance of drug addiction. *Neuropsychopharmacology*, 39(2), 254.
- World Drug Report. (2018). <https://www.unodc.org/wdr2018/> Accessed on:10.09.19
- Yıldırım, A., & Şimşek, H. (2013). *Sosyal bilimlerde nitel araştırma yöntemleri*. Ankara: Seçkin Yayıncılık.

- Yılmaz, E., Şahin, Y. L., Haseski, H. İ., & Osman, E. (2014). Lise öğrencilerinin internet bağımlılık düzeylerinin çeşitli değişkenlere göre incelenmesi: Balıkesir ili örneği. *Eğitim Bilimleri Araştırmaları Dergisi*, 4(1), 133-144.
- Yılmaz, N., Özer, E. & Fettahoğlu, R. (2020). Sağlık Yöneticisi Kavramına İlişkin Bir Metafor Analizi, *Anemon Muş Alparslan Üniversitesi Sosyal Bilimler Dergisi*, 8(1) 115-124.
- Young, K. S. (1998). Internet addiction: The emergence of a new clinical disorder. *Cyberpsychology & behavior*, 1(3), 237-244.
- Yüncü, Z., Aydın, C., Coşkunol, H., Altıntoprak, E., & Bayram, A. T. (2006). Çocuk ve ergenlere yönelik bir bağımlılık merkezine iki yıl süresince başvuran olguların sosyodemografik değerlendirilmesi. *Journal of Dependence*, 7, 31-37.