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Sexual Addiction: Definition, Etiology and Treatment

Cinsel Bağımlılık: Tanımı, Etiyolojisi ve Tedavisi

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Abstract

In present day, it is known that addiction does not only derive from a psychoactive substance but also from the pleasure and relief after some behaviors. Sexual addiction, having always been more difficult to accept compared to other behavioral addictions in therapeutic societies, is a psychological disease. It has devastating effects on addicted individuals and the people around them. However, compulsive sexual behavior could be understood and addicted people could be treated accordingly in the 21. century. Studies regarding sexual addiction in the international literature after 2000s have increased but there are almost no studies on the issue in Turkey. This study reviews the related literature comprehensively and presents the data in a determined frame. It explains sexual addiction disorder and describes its phenomenological aspects, characteristics and diagnostic criteria. Next, it gives naming disagreements in the literature, alternative name suggestions, classification problem, symptomatology, consequences and impacts, etiology and etiological researches. The etiological researches are classified chronologically as 70s and 80s, 90s and 2000s and after. It is aimed to demonstrate the scientific progress and improvement regarding sexual addiction phenomenon. In light of this information, it is discussed that sexual addiction should be researched in Turkey and suggestions are made accordingly.

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Keywords: Sexual addiction, compulsive sexual behavior, hypersexuality, non-paraphilic sexual behavior

Öz

Günümüzde bağımlılık olgusunun sadece psikoaktif bir maddeden değil, bazı davranışların yarattığı haz ve rahatlama hissinden de kaynaklanabileceği bilinmektedir. Terapötik toplumda diğer davranışsal bağımlılıklara göre kabul edilmesi daha zor olan cinsel bağımlılık psikolojik bir rahatsızlıktır. Bağımlı bireyler ve çevrelerindeki kişiler üzerinde son derece yıkıcı etkilere sahiptir. Oysa 21. yüzyılda kompulsif cinsel davranışlar medikal bağlamda daha iyi anlaşılabilir ve bağımlı kişiler buna göre tedavi edilebilirdi. 2000'ler sonrası uluslararası alanyazında konuyla ilgili yapılan çalışmalar arttığı halde Türkiye'de cinsel bağımlılıkla ilgili neredeyse hiç çalışma yapılmamıştır. Bu sebeple bu çalışmada cinsel bağımlılık hakkında kapsamlı bir alanyazın taraması yapılmış ve elde edilen veriler belli bir çerçeve içinde sunulmuştur. Öncelikle cinsel bağımlılık rahatsızlığı açıklanmış, fenomenolojik özellikleri, karakteristikleri ve tanı kriterleri belirtilmiştir. Daha sonra alanyazındaki isimlendirme anlaşmazlıklarına, alternatif isim önerilerine ve sınıflandırılma sorunsalına, semptomolojisine, doğurduğu sonuçlar ve etkilerine, tedavi yöntemlerine, etiyolojisi ve etiyolojisine ilişkin yapılan çalışmalara yer verilmiştir. Etiyolojik çalışmalar kronolojik olarak 70'ler ve 80'ler, 90'lı yıllar ve 2000'ler ve sonrası olarak gruplandırılmış ve bu şekilde uluslararası alanyazında cinsel bağımlılık olgusuyla ilgili varolan verilere ilişkin gelişme ve ilerlemenin görülmesi amaçlanmıştır. Bu bilgiler ışığında cinsel bağımlılığın Türkiye'de araştırılmasının gerekliliği tartışılmış ve önerilerde bulunulmuştur.

Anahtar sözcükler: Cinsel bağımlılık, kompulsif cinsel davranışlar, hiperseksüalite, parafilik olmayan cinsel davranışlar

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PEOPLE like to try new experiences. These experiences may not always lead to good consequences. Throughout the history, human beings have been curious about the substances and conditions which create changes in their mood (Babaoğlu 1997). From time to time, this curiosity has caused some psychological problems such as addiction. Addiction is a chronical disorder having impacts both on individual and societal level (Thege et al. 2015). Addiction that can be seen as the antithesis of rational behavior (Becker and Murphy 1988) is a health problem which causes some changes in the chemistry of the brain, subjugates neural circuits on some level, exists nearly from the first days of humanity and it is one of the most discussed disorders in the field of psychology from past to present.

In particular, considering the behavioral addictions, addiction is one of the most widespread mental disorders (Sussman et al. 2011). The failure to resist an impulse, a motive or an attraction take part in the core aspects of behavioral addictions, despite the harm to addicted person and others around him (APA 2000). The repeated behavior pattern has a special area in the behavioral addictions and ultimately, to be occupied with this behavior continuously give rises to deformations in the other functional areas (Grant et al. 2010). Online gaming, television, pornography, shopping, internet, gambling and compulsive sexual behaviors are approached among behavioral addictions in general (Clarkson 2013, Hellman 2013). Sexual addiction can be defined as a disorder in which the behavior used as an addiction is some kind of sexual act (Goodman 1993). A sexual addicted individual also needs sexual acts compulsively in order to reach some kind of "getting high" feeling - or peak of emotions - formed by the pleasure that an alcohol addicted individual gets from his drink or an opioid addicted individual gets from the opioid-containing substances or an gambling addicted individual gets from gambling. Continuing the behavior despite the recurrent failures to control the sexual behavior and its negative consequences are two patterns that characterize the behavior and sexual addiction is a way used to produce pleasure and escape from the internal discomfort (Goodman 1998).

In the literature there is an ongoing debate related to the sexual addiction which is still not classified as an addiction by Diagnosis and Statistical Manual of Mental Disorders (DSM-5, 2013). While some researches reject this disorder completely and claim that erotic behaviors are a matter of preference (Levine and Troiden 1988), there are also other researchers who suggest and use various names such as "compulsivity", "hypersexuality", "extreme sexual behavior" (Gold and Heffner 1998). From here, it is seen that a nomenclature that is valid by everyone for compulsive sexual acts and desires that are out of people's control is still not possible. Sussman (2007) expressed that this situation is normal because sexual acts of people may differentiate, and it is very not simple to distinguish "normal" and "abnormal" sexual behaviors in point of style and frequency.

It is seen that sexual addiction has been studied and reviewed more, and compulsive sexual acts are reviewed more in the medical context after 2000s. In the technological era we live in, internet has provided the convenience of both free and limitless access to sexual material and finding partners with different sexual orientations. Cooper et al. (2000) expressed that cybersex addicted individuals spend almost 15-20 hours to find online sexual

material weekly. According to the data of Pornhub, a worldwide known porn platform, on 11 March 2020, there is 11.6 % increase in the porn views all over the world compared to pre-COVID-19 outbreak. During the period lasted less than one month between 24-25 February 2020 and 17 March 2020, all the 27 countries from which data is provided showed increases between 4% and 24% in the use of pornography (Pornhub 2020). Even more important is the hours when pornographic material is watched. It has been stated that the most watched hours of porn in both European, American and Asian countries are around 3-4 in the morning (Mestre-Bach et al. 2020). This situation brings to mind that people who watch pornographic material have irregularities in their sleep hours. In addition to comorbid problems caused by insomnia, it is known that frequent exposure to pornography can lead to emotional and relational problems (Livingston and Smith 2014).

However, this issue has been less talked and discussed and less researched in some societies compared to others. Turkey is one of these societies. Only one thesis study (Sevin 2018), a case study (Eroğlu and Tamam 2016) and a study measuring also compulsive sexuality variable while searching for impulse control disorders but with various limitations (Karakuş et al. 2011) are found in the scanning of sexual addiction in Turkey. Social norms related to sexuality and sex in Turkey are more stringent than those in the western countries. Some researches (Irvine 1995) argue that sexual addiction and problematic sexual behaviors may be experienced more intensely in the societies with deep concerns about sexuality. Considering the sexual crimes committed in Turkey, sexually explicit acts of violence and the statistics about those, it is clearly seen that we are on a very critical threshold. Accordingly, comprehensive, longitudinal researches should be made on the etiology, comorbidity, impacts on individual and society, and the individual with tendencies should certainly be treated in the light of those researches.

The aim of this study is to provide a source for future researches and practices by a detailed review of sexual addiction, its consequences and etiology that can cause to confusion as a result of being explained by different definitions, and about which there are highly limited number of studies especially in Turkey. Within this content, the national and international studies published in refereed journal have been searched by using key sentences, the data obtained were collected within a certain framework and compiled, and the studies related to the etiology were presented by classifying them chronologically.

Phenomenon of sexual addiction

According to Schaeffer (2009) sexual addiction should be classified among behavioral addictions because this disorder is the most evident indicator of a problem from the past with negative consequences. Here, addictive behavior that is constantly used is a kind of sexual behavior, and it contains both basic features of addictive disorders as it is a method used for both pleasure and escape from internal discomfort. Two features that characterize the behavior: (a) recurrent failure to control the behavior and (b) continuing the behavior despite the damaging consequences (Briken et al. 2007). Sexual addiction is both similar to and different from other addictions (Hughes 2010). It has always been more difficult

to acknowledge and embrace it both by patients and societies compared to other addictive disorders, and it has been approached as a sin or a disease in certain periods according to the religious or political perspectives of the era (Garcia and Thiabut 2010). Whereas, the researches set forth that uncontrolled sexual behaviors are a disorder by which people suffer, and it is not related to perversion (Schneider 1994). As Sussman (2007) expressed, it is not easy to decide which behaviors are to be approached normal and which ones should be seen as abnormal since sexual behaviors of people vary in terms of frequency and style. The problematic in sexual behavior is that it influences the individual's life by engendering first pleasurable then destructive and harmful consequences, and the individual cannot stop the behavior despite the later consequences.

Sexually addicted individuals long for to be admired and reflective reactions because they are lack internal sources to equip them with self-confidence and to be accepted (Giugliano 2006). Sexual addiction gives rise to discussions both in society and therapeutic societies for a long a time and it will continue to be discussed for long years (Hall 2011). When sexual addiction is approached as a psychological disorder in some academic and psychiatric societies, it is criticized heavily, and one of the reasons of it is that to name extraordinary sexual acts is a problem on its own. Non-normative sexual practices will always be defined within the moral codes of that society (Irvine 1995). At that rate, it is obvious that the discussions over the sexual addiction will continue for a long time.

Sexual addiction term is accepted professionally with Patrick Carnes who first defined the sexual addiction term as a pathological relation between individual and sex (Carnes 1983). Carnes (1983) indicated that the following criteria is necessary to diagnose sexual addiction.

Table 1. Diagnostic criteria of sexual addiction (Carnes 1983)

1. Recurrent failure to resist the urge to perform a sexual behavior
2. Sense of tension that gradually increases just before starting sexual behavior
3. Pleasure or relaxation felt while performing sexual behavior
4. The presence of at least five of the following items in the individual: i. Spending too much time with preparatory sexual acts before the actual sexual behavior, ii. The individual engages with the sexual behavior more than intended, iii. Recurrent failure to decrease, control and stop sexual behavior, iv. The length of time spent both on pre-behavior preparation and to get rid of post-behavior impacts, v. Engaging in the sexual behavior when it is necessary to fulfill professional, academic, household or social obligations, vi. Social, professional or recreational activities that are important to the individual that are abandoned or reduced due to sexual behavior, vii. Continuing sexual behavior despite continuous social, financial, psychological or physical problems arising from sexual behavior, viii. The need to increase the frequency or depth of sexual behavior in order to achieve the desired effect, or the reduction of the effect of sexual behavior that continues at the same intensity, ix. Feeling restless or irritable when sexual behavior is not being performed.
5. Some symptoms persist for at least a month or repeatedly over a longer period of time.

The revolutionary study of Carnes has been embraced by thousands of individuals with compulsive sexual behaviors (Levine and Troiden 1988). Goodman (1992) defined sexual addiction as: "1) recurrent failure to control a behavior to function both as producing pleasure and escape from internal discomfort 2) continuation of the same

behavior despite its harmful consequences". Understanding what sexual addiction is and what is not has great importance with regard to diagnose and to treatment. Many researchers (Orford 1978, Quadland 1985, Barth and Kinder 1987, Coleman 1992, Goodman 1998, Gold and Heffner 1998, Kafka 2003) highlighted that sexual addiction should not be seen as equivalent or confused with hypersexuality, nymphomania, paraphilic disorders or Don Juanism. Uncontrolled sexual desire and behaviors differ from hypersexuality, paraphilic disorder and sexual dysfunctions by such criteria as inability to develop intolerance upon cessation of sexual behavior, feeling restless, tense or uncomfortable, attempts to neglect or control the behavior (Goodman 1998). The latter ones consist of extreme sexual activities mainly based on inability to reach sexual pleasure (Gold and Heffner 1998). The other point to be emphasized is the concept of paraphilia. Black et al. (1997) underlined that paraphilic compulsive sexual behaviors create a discomfort in the object of sexual satisfaction and include unconventional sexual behaviors (such as exhibitionism and voyeurism) where as non-paraphilic sexual behaviors are uncontrolled, extreme classical sexual behaviors, while they make the distinction between paraphilic and non-paraphilic behaviors. Indeed, sexual addiction, or compulsive sex addiction in other words, has three main components: recurrent sexual urges, recurrent sexual fantasies and recurrent sexual behaviors (Zengin Eroğlu and Tamam 2016). Additionally, nomenclature of compulsive sexual behaviors has created ongoing debates in the literature of psychology and psychiatry.

Controversies in nomenclature

There is no consensus on a name that expresses this disorder in the best way in the literature (Hook 2010). This controversy on a certain name for diagnostic category makes it difficult to follow the related data. There are many titles such as "addiction", "compulsivity", "impulse control" and "extreme sexual behavior" in the available literature (Gold and Heffner 1998). In other words, there is not a common name for the uncontrolled sexual desires and behaviors (Sevin 2018). For instance, such people as Coleman and Raymond (2003) explains this disorder as compulsive sexual disorder whereas some researchers like Barth and Kinder (1987) use the term of impulse control disorder. Kafka (2009) used "Hypersexual disorder" to define non-paraphilic extreme sexual behavior and suggested following criteria for DSM-5.

Even though it is Carnes (1983) who used the concept of sexual addiction for the first time, the researcher who first suggested to conceptualize extreme sexual behaviors as an addiction was Orford (1978). Orford defined the disorder as a disordered control over a behavior related to the discrepancy in the use and its negative consequences. The situation gained more popularity by "Out of the Shadows: Understanding Sexual Addiction" book of Carnes (1983). Some writers such as Kingston, Firestone and Orford developed sexual addiction concept, but they put forward adverse opinions on how to classify it (Garcia and Thiabut 2010). Nomenclature is not the only point where there is no consensus. For Levine and Troiden (1988), the "thing" named as sexual addiction or compulsive sexuality

Table 2. Suggestion of a diagnostic criteria for non-paraphilic extreme sexual behaviors to DSM-5 (Kafka 2009)

A. Over a period of at least 6 months, recurrent and intense sexual fantasies, sexual urges, or sexual behaviors in association with 3 or more of the following 5 criteria: A1. Time consumed by sexual fantasies, urges or behaviors repetitively interferes with other important (non-sexual) goals, activities and obligations. A2. Repetitively engaging in sexual fantasies, urges or behaviors in response to dysphoric mood states (e.g., anxiety, depression, boredom, irritability). A3. Repetitively engaging in sexual fantasies, urges or behaviors in response to stressful life events. A4. Repetitive but unsuccessful efforts to control or significantly reduce these sexual fantasies, urges or behaviors. A5.Repetitively engaging in sexual behaviors while disregarding the risk for physical or emotional harm to self or others.
B. There is clinically significant personal distress or impairment in social, occupational or other important areas of functioning associated with the frequency and intensity of these sexual fantasies, urges or behaviors
C. These sexual fantasies, urges or behaviors are not due to the direct physiological effect of an exogenous substance (e.g., a drug of abuse or a medication)

is not essentially a clinical entity, only a "pseudoscientific" concept representing erotic values. By indicating that they adopt an interactive approach towards mental diseases, Levine and Troiden (1988) stated that compulsive sex and sexual addiction are nothing more than labelling behaviors diverging from the erotic standards. From this expression, it is possible to see that Levine and Troiden (1988) did not perceive extreme sexual activities as a disorder.

Goodman (1998), one of the researchers into this subject, underlined two significant points when addressed to sexual addiction concept. The first one is that sexual addiction is not a new trend or a unique disease according to neither relevant discussions nor the nature of the addictive behavior. By this theory, it is clearly seen that he differs from Levine and Troiden. The second point is that sexual addiction meets some diagnostic criteria like other behavioral addictions. The addictive behavior is a sexual activity in this disorder and individual turns to a compulsive sexual behavior to regulate his internal world (Goodman 1998).

Considering last editions of Diagnostic and Statistical Manual of Mental Disorders (DSM-III-R, DSM-IV, DSM-5) by American Psychiatry Association (APA), it would not be wrong to say that the historical process of accepting sexual addiction as a disorder is not stable (APA 1998, 1994, 2000, 2013). DSM-III-R (APA 1987) placed "sexual addiction" concept among other types sexual disorder, however, it did not give any details (Black et al. 1997), DSM-IV (APA 1994) removed sexual addiction from the literature just as ICD-10 (1992) (International Classification of Diseases by World Health Organization) (Black et al. 1997, Bancroft and Vukadinovic 2004, Shepherd 2009). Despite the diagnostic criteria suggested by Kafka (2009), compulsive sexual behaviors are not placed into DSM-5 (APA 2013) either.

In this study, by following Carnes (1983) it is considered to use the term of sexual addiction appropriate because it is thought that this concept is the term which expresses the relation between uncontrolled sexual behavior and "mood modifying experience" in the best way.

The etiology of sexual addiction

The number of empirical researches of sexual addictions was limited until 2000s (Gold and Heffner 1998). It is seen that such studies have increased in the literature after the 2000s. Some researches conducted are grouped according to the following reasons:

1. Childhood traumas: It is estimated that 30% of psychiatric disorders diagnosed in adults may be directly related to childhood experiences (Diehl et al. 2018). Childhood traumas create a fear of establishing close relationships in adulthood, and this problem requires specialist intervention (Hughes 2010). People with avoidant attachment during childhood tend to relationships or sexual relationships with little emotion or feelings (Faisandier et al. 2011, Beveridge 2017, Katehakis 2017). These problematic attachment types can attract individuals to increasingly sexual relationships in the name of affirmation and affection (Hall 2011). Developmental features such as dysfunctional families, traumatic experiences, or being neglected are among the causes of sexual addiction when considered in an individual context (Briken 2007).

The most common traumatic childhood experience is abuse. Individuals who were sexually, physically or emotionally abused in childhood are likely to experience general problems in their emotions and behaviors in adult life (Diehl et al. 2010). For sexual addicted individuals, the sexual acts in the adulthood may be re-enactment of sexual abuse occurred in the childhood (Giugliano 2006). At that rate, it can be estimated that sexual relationship is way of controlling others used by the victims or taking back what is lost at the childhood when they suffered. In case sex was learned as a way of controlling the environment in the childhood, and even the only way of it, it is possible to for the victims to use sex as a way of exhibiting personal control in the adulthood (Gold and Heffner 1998). Krupnick and Horowitz (1981) stated that a natural consequence of severe trauma can be replicated as reversal, behavioral re-enactment, and other types of intrusive symptomology. If the behaviors that becomes sexual addiction are learned by traumatic experiences and re-enactment is repeating this trauma, poorly controlled sexual behaviors form another type of intrusive symptoms of post-traumatic stress disorder (PTSD) at that rate. Indeed, it is estimated that it is not a pleasure but a strategy to survive, if the sexual addicted individual experienced childhood trauma. According to Hall (2011) sexual trauma victims may be addressing to compulsive sexual behaviors in order to numb extreme arousal feelings such as hyperactivity, obsessive thinking, anger and panic, and to escape from the feelings of detachment, numbness, depression and burnout experienced by extreme arousal.

Children's nature is largely rooted in the family they live in and the parents by which they were raised because child and family members live in interaction, they create a culture and sustain it (Roostin 2018). The family is one of the first factors creating his identity and forming his mind structure. Family roots can also be effective on determining learned patterns of addictive behavior. Historical secrets in the family may cause to various disorders by pushing the coping mechanism of the individual (Hall 2011). Some situations as

depression, substance use, abuse, mother being raised separately from her family are the factors at the risk of trauma for children (Behere et al. 2017).

2. A method to escape from bad feelings: There are some findings to reveal that there is a controversy relationship between negative mood and sex in some individuals (Mathew and Weinman 1982, Nofzinger et al. 1993, Angst 1998). It is known that an increase in the sexual interest occurring in the low levels of negative moods and sexual response inhibition can be responsible of the uncontrolled sexual behaviors observed in some individuals (Garcia and Thiabut 2010). Negative feelings such as loneliness, low self-esteem and anxiety may cause the individual to lose the control over sexual behaviors (Levine and Troiden 1988). From this perspective we encounter a vicious circle where sex can cause to these negative feelings, and these negative feelings can also be among the causes of sexual addiction. Curtois and Weiss (2017) revealed that sexual addiction can be method to be applied to escape from the painful memories based on childhood experiences (cited by Larsen 2019).

Black et al. (1997) reached exceptionally interesting data by their qualitative research conducted by 36 sexual addicted people. The researchers asked the patients what they like about their sexual behaviors. 21 people (58%) told that it is a way out other concerns, 15 people (42%) expressed it as a way out of anxiety, 8 people (22%) told it makes them feel better temporarily, 5 (14%) people stated that they feel themselves important, 4 people (11%) told they acquired power, 3 people (8%) told it gives them excitement. 1 person said that "it is a way of meeting with new people" while another one told that it is an "ego booster". When they asked what they do not like about their sexual behaviors, 13 participants (36%) emphasized on the feeling of losing control and "time consuming feature". Eleven people (31%) mentioned the regret they experience after the sexual act. Two people spoke of betraying the ones they love, two people said it causes to depression and two people talked about feeling ashamed, while a woman told that she feels herself like a "whore".

3. Biological and neurobiological mechanisms: Understanding this disorder from a biological and neurobiological perspective is of great importance in terms of its acknowledgement in societies. Functional brain imaging of patients with brain trauma showed that prefrontal lesions and bilateral lesions of the temporal lobe regions are associated with hypersexuality and disinhibition (Garcia and Thiabut 2010). The mammalian brain is designed to take its final shape by the effects of early trauma. Accordingly, understanding of childhood neurobiology should be started by understanding the effects of early stress on brain development (Teicher et al. 2002). Teicher et al. (2002) searched the neurobiological changes occurring in the individuals after traumatic experiences. In this research it was found that one of the changes that occurs in the hippocampus increases the resolution and amnestic symptoms of PTSD. Schwartz et al. (1995) told that the addictions caused by the traumas experienced in the past of the individuals who become sexual addicted later are actually a type of PTSD and dissociative disorders. Hall (2011) indicated that insecurely attached individuals may not be producing enough dopamine or noradrenaline in the orbitofrontal region of the cortex to facilitate sexual arousal and inhibition, accordingly the

brain might be trying to find the substance that it itself did not know how to produce by going outsourcing and this situation may result in sexual addiction.

Researches about etiology

Sexual addiction-related research conducted in Turkey is little, although it has been observed that especially after 2000s many researches have been made the international literature. In this study, researches on the etiology of sexual addiction are discussed in chronological order.

70s and 80s: It was found that 80% of the Courtois' (1979) nonclinical sample of old incest victims experienced various sexual problems including a compulsive desire for sex; 35% of incest victim sample of Herman (1981) had random sexual relationships and some victims sought affection and care while others addressed to sexual behaviors; 15% of woman incest victims of DeYoung (1982) addressed to random sexual relationships (cited by Gold and Heffner 1998).

These three researches conducted before the classification of extreme compulsive sexual behaviors as an addiction showed that the sexual problems of sexual abuse and incest victims were analyzed. We can see that the findings are among the symptoms of the disorder later called sexual addiction.

90's: In Carnes's (1991) study, it was found that 97% of the participants were subjected to emotional neglect, 81% to sexual abuse, and 72% to physical abuse in a study conducted with 233 sexual addicted men and 57 sexually addicted women. The high amount of negligence found in this study highlighted how important emotional factors are and led subsequent research in this direction.

Carnes and Delmonico's (1996) study on 290 sexual addicts revealed that individuals exposed to physical and sexual abuse develop more comorbid disorders in adulthood. In this way, it has been found that individuals exposed to sexual and physical abuse are prone to develop other addictions besides sexual addiction

In the study of Black et al. (1997), 92% of the sample stated that their brains were constantly preoccupied with sexual fantasies or they were sexually active. This research strengthens the rationale for naming the disorder as addiction. Eight people (22%) in the same study stated that they had been subjected to physical abuse during childhood and eleven people (31%) reported sexual abuse. Physical and sexual abuse appear as variables common to all etiology studies.

2000s and Later: The interest in the subject and the increase in the studies conducted in 2000 and after are clearly seen in the literature. The research of Bancroft and Vukadinovic (2004) is sufficient to take the event to a different dimension. In this study, both quantitative and qualitative data were collected from a sample of 31 men diagnosed with sexual addiction and compared with the control group. While the experimental group got high scores on the MSQ (Mood and Sexuality Questionnaire) and SES (Sexual Excitation Scale) tools, they got almost the same points from the SIS1 and SIS2 (Anxiety, Depressive Emotions

and Sexual Behavior Scale and Sexual Inhibition Scale) as the men in the control group. This study found no evidence that participants engaged in extreme non-paraphilic sexual behavior lacked sexual behavior inhibition. Accordingly, "out of control" sexual behaviors may arise from many different mechanisms and more research is needed on this subject (Bancroft and Vukadinovic 2004).

Giugliano (2006), in his qualitative study on 14 sexual addicts, stated that five participants were subjected to emotional abuse and nine participants were sexually abused, and brought emotional abuse back to the agenda.

A study carried out in the Amen clinic, a group of mental and physical health clinics working on the treatment of mood and behavioral disorders, which enables the monitoring of the brain and its activities, shows that 67% of sexual addicts have a problem in the thinking part of their brains, and this part is fixed to negative thoughts and behaviors (cited by Schneider 1994). This research emphasized the need for more research on the impact of biological and neurobiological factors.

On the other hand, Perera et al. (2009) found that sexual abuse experienced in childhood, poor family environment and self-esteem constitute 8.8% of sexual addiction in their study with 539 people. These findings are consistent with previous studies showing that individuals who were sexually abused during childhood and who grew up in poor family environments seek more sexual satisfaction and tend to develop sexual compulsive tendencies than others

In the study of Diehl et al. (2010), the sexual addiction rate of the subjects who were physically abused in their childhood was 61.9%. In addition, childhood maltreatment in sexually addicted individuals gave a high average value (71.4%).

McPherson et al. (2014) confirmed the findings of Carnes and Giugliano by revealing that emotional abuse may play a greater role on sexual addiction than sexual or physical abuse with the findings in their studies. In the same study, factors such as emotional abuse, early exposure to pornography, sexual addiction in the family were found to be significantly related to sexual addiction.

Paz et al. (2021) used the Hebrew Bergen-Yale Scale of Sexual Addiction in their quantitative study on 177 homosexuals and found that high neuroticism and low honesty was moderately associated with sexual addiction. This study reveals that character structure can also be important.

It is extremely limited on this subject in Turkey. In the national literature, a thesis study (Sevin 2018) aiming to directly measure sexual addiction, a case study (Eroğlu and Tamam 2016), and a study that measures the compulsive sexuality variable while examining impulse disorders (Karakuş et al. 2011) were found.

Sevin (2018) made a quantitative study to examine the relationships between sexual addiction, early maladaptive schemes and life satisfaction, and the sample group consisted of a total of 361 people, 158 males and 203 females. In this study, Personal Information Form, Sexual Compulsion Scale developed by Kalichman et al. (1994) and adapted into Turkish by Akın and Çelik (2013), Young Schema Scale and Life Satisfaction Scale were used

respectively. The findings of the study revealed that people who have sexual desire and have sexual dreams while in a negative mood are more prone to sexual addiction. Besides, when the relationship between religious proclivity and sexual compulsion scores was examined, it was found that the participants who reported higher religious predisposition were more prone to sexual addiction and then the relationship between life satisfaction and sexual compulsion scores was examined, it was found that people with more sexual compulsions had less life satisfaction. In the study the group that frequently feels lonely wass more prone to sexual addiction. It was found that individuals with high sexual compulsion score had disconnection, rejection, brutality, and autonomy impairment in early period maladaptive schemes. In addition, it has been revealed that disconnection and rejection schemes are more strongly associated with sexual addiction compared to other schema domains. This study of Sevin (2018) is the most comprehensive sexual addiction research conducted in our country and has revealed important findings in terms of determining both the factors causing addiction and the groups at risk.

The case study of Eroğlu and Tamam (2016) is remarkably interesting because it has some atypical features. Although limited studies on the subject stated that initial period of sexual addiction or compulsive sexual behaviors were expressed as adolescence, and the patients who applied to clinics with the complaint of compulsive sexual behavior were generally men, the case in this study was a 47-year-old woman and no comorbid disorder was encountered. This case example, who has no experience of trauma and has not had sexual intercourse with anyone other than her husband, differs from the literature. This shows how limited our knowledge of sexual addiction or compulsive sexual behavior is.

Karakuş et al. (2011) conducted a study that correlated with the prevalence of impulse control disorders and the presence of Axis I diagnoses in university preparation students in young adult age group, and the frequency of compulsive sexual behavior was found to be 0.9%, and this rate was less than all other impulse disorders. This level, which is much lower than other studies, is thought to be due to the difficulty of giving appropriate answers to questions asked for social and cultural reasons (Karakuş et al. 2011). In addition, the fact that both individuals with compulsive sexuality are men in this study brings to mind the social norms and taboos on female sexuality.

Typology of sexual addiction: emotional, cognitive and behavioral symptoms

To diagnose individuals as "sexual addicted" does not mean to label them as "pervert". According to Hook (2010) a sexual addicted individual is an individual who experiences persistent, dense, evoking fantasies, urges or behaviors causing clinically important disorders or deteriorations at least in one area of the life. For example, let's consider a patient who wants to elude from alcohol and drug addiction. If this individual addresses to escorts in order to stay away from chemicals instead of handling his psychological problems and fighting with them bravely, it is possible to diagnose this patient as sexual addicted (Hall 2011). It means that sexual addiction is determined by the relationship between behavioral

pattern and individual's life, not by the type of behavior frequency or social acceptance (Hook 2010). In that case it is possible to say that the problem is not having sex too much, but the difficulties in coping its consequences.

Carnes (1992) listed the typology of sexual behavior as:

1. Uncontrolled sexual behavior patterns despite negative consequences
2. Continuing self-destructive or highly risky behaviors insistently
3. The individual's constant desire to limit sexual behavior.
4. Sexual obsessions becoming a basic coping mechanism
5. Increase in the amount of sexual experience desired
6. Severe mood changes around sexual activity
7. Negligence towards other areas of life other than sexuality (Carnes 1992)

Gold and Heffner (1998) presented emotional, cognitive and emotional symptoms of sexual addiction by compiling studies of many researchers (Carnes 1983, Schwartz and Brasted 1985, Pincu 1989, Earle and Crow 1990, Coleman 1992)

Table 3. Emotional, cognitive and behavioral symptoms of sexual addiction (Gold and Heffner 1998)

Symptoms of sexual addiction	
Behavioral symptoms	**Cognitive and emotional symptoms**
• Frequent sexual encounters • Compulsive masturbation • Seeking new sexual encounters out of boredom with old ones • Repeated unsuccessful attempts to stop or reduce excessive or problematic sexual behaviors • Engaging in sexual activities without physiological arousal • Frequent use of pornography	• Obsessive thoughts of sexuality and sexual encounters • Rationalization for continuation of sexual behaviors • Guilt resulting from excessive or problematic sexual behavior • Loneliness, boredom, and/or rage • Depression, low self-opinion • Shame and secrecy regarding sexual behaviors • Indifference to usual sexual partner • Lack of control in many life aspects (not directly related to sexual behavior) • Desire to escape from or suppress unpleasant emotions • Preference for anonymous sex • Experientially disconnecting intimacy for sex

The behavioral, cognitive and emotional symptoms compiled by Gold and Heffner (1998) demonstrate that this disorder generates negative consequences. Guilt, loneliness and anger, depression, shame, latency, negligence are the negative emotions experienced and no individual prefer to experience these emotions. This situation implies that compulsive sexual behaviors are not a preference but a psychological disorder.

Consequences of sexual addiction: its subversive impact on individuals

It is a known fact that sexual addiction also has subversive impact on individuals such as all other addictions when it is not taken under control by various therapy methods. In the medical context of sexual addiction, too much use of physical pleasure or arousal to

the point of distress plays a role in producing greater pressure (Iwen 2015). The negative consequences of addiction, discomfort, shame and guilt feelings of the individual require a deeper understanding of the disorder both in phenomenological and psychobiological context.

Garcia and Thiabut (2010) stated that patients with extreme sexual behaviors struggle with an intense aversion and depressive thoughts when they try to stop inappropriate sexual behaviors. Withdrawal symptoms occur when the sexual object is removed, and the mind constantly thinks of this object. This situation starts to influence on the life (Schaeffer 2009). Despite the desire of salvation, sexual addicted individuals do not demand too much medical support based on the shame they feel. In general, they apply to psychiatrists with suicide attempt or depression, anxiety symptoms (Garcia and Thiabut 2010).

First of all, it is the risk of developing comorbid serious diseases that should be underlined. Sexually transmitted diseases such as HIV/AIDS or genital wounds, unwanted pregnancy can frequently be seen (Carnes 1983, Sussman 2007, Garcia ve Thiabut 2010). Comorbid psychiatric disorders are also common at sexual addicted patients. Mood modification disorders, anxiety disorder, substance use and major depression are comorbid psychiatric disorders that are observed with the sexual addiction most frequently (Black et al. 1997, Garcia and Thiabut 2010).

Emotional withdrawal, inability to establish intimate relationships, legal participation, isolation, guilt, latency, feeling abnormal/sick, dishonored, ashamed, feeling empty, numb after sexual act and regret are some of the problems that the individuals coping with sexual addiction have to face with (Gold and Heffner 1998, Sussman 2007). In their qualitative research conducted with 22 sexual addicted people, Black et al. (1997) stated that 31% (7 people) of the subjects attempted suicide. Sexual addicted people tend to throw all the good feelings from the window and endanger their careers, reputation, loved ones for their sexual impulse (Schaeffer 2009). The time spend of sexual experiences may have such consequences as experiencing challenges at spending time on school and work, isolation from family members, living a secret life, falling into financial difficulties, getting arrested because of sexual crimes (voyeurism, exhibitionism, prostitution or inappropriate phone calls), damaged reputation of the individual and even being victims of bad people (being attracted to people who can hurt them) (Levine and Troiden 1988, Sussman 2007).

Surely, not all the sexual addicted people experience all those consequences. Some individuals may not experience the negative consequences at the first stage of their addictions. However, the longer the addiction lasts and the longer it is left untreated, the more likely it will be to experience negative repercussions (Gold and Heffner 1998). Despite the risk factors listed above sexual addicted people continue to the compulsive sexual behaviors because these behaviors save them from the troubles they experience, even if for a temporary time. This feeling of relaxation is actually a sexual "high" moment, different forms of the same "high" moment can be felt while taking illegal drugs, alcohol or food (Levine and Troiden 1988). It means that different types of getting high may lead to different disorders such as substance, alcohol or eating disorder.

Treatment of sexual addiction

Although it has a prevalence between 3% and 10% in the general population, sexual addiction is often underdiagnosed and poorly treated (Malandin et al. 2020). As in all disorders, the first step of an effective treatment in compulsive sexual behavior is correct diagnosis. Psychotherapeutic and pharmacotherapeutic methods can be used for sexual addiction treatment, which are examined among behavioral addictions (Zengin Eroğlu and Tamam 2016). Goodman (1993) suggested to use pharmacological and behavioral and also psycho-dynamical approaches together in the treatment of sexual addiction. According to this model, individuals learn how to regulate their behaviors with a combination of internal motivation, psychological support and affect-regulating drugs at the first stage. At the second stage (fixation of behavior and impact), they address to the prevention of relapse by the distinction between high and low risk forms of sexual behavior. Patients are oriented towards healthier and more traditional sexual behaviors rather than pathological behaviors.

Psychodynamic methods: Researches show that 12-step approach and cognitive behavioral therapy methods used for substance addictions are also effective in the treatment of sexual addiction (Gold and Heffer 1998, Garcia and Thiabut 2010, Kraus et al. 2016, Larsen 2019). Such methods as psychodynamic therapy (Derbyshire and Grant 2015), group therapy (Gold and Heffer 1998, Mick and Hollander 2006, Derbyshire and Grant 2015), couple therapy (Mick and Hollander 2006, Karila et al. 2014), motivational interviewing and family therapy (Karila et al. 2014) have been used successfully. Acceptance and commitment therapy (ACT), which has gained popularity in the last few years, is a new approach that combines behavioral cognitive therapy, acceptance, awareness and behavior modification strategies to provide psychological flexibility (Twohig 2012). Crosby (2011) found that it was successful in reducing compulsive pornography use.

Pharmacological methods: The first step in using pharmacological therapy in sexual addiction is to determine the diagnosis in its primary form, because there are many neurological conditions responsible for hypersexuality, especially with frontal and/ or temporal dysfunctions (Malandin et al. 2020). There are available researches showing that naltrexone (Grant and Kim 2001, Bostwick and Bucci 2008, Kraus et al. 2015, Raymond et al. 2016), topiramate (Khaazal and Zullino 2006) and citalopram (Malladi and Sigh 2005, Tosto et al. 2008) can reduce compulsive sexual behavior.

Conclusion

It is still being debated whether problematic sexual behaviors should be considered as a psychological disorder or not. Some researchers argue that these constantly repetitive behaviors should be considered as an addiction in the therapeutic community due to their destructive effects on individuals and societies, considering the negative consequences, psychological, physiological, financial and familial problems while others argue that which sexual behaviors are considered extreme and which are considered normal will be a subjective decision, so it is not such a type of addiction. Others consider compulsive sexual behavior

as a disorder but classify it under impulse disorders. In this study, the concept was accepted as "sexual addiction" and expressed as such, because studies indicate that these behaviors become compulsive, they go beyond preference. Etiological studies and comorbid disorders related to sexual addiction also reveal that there is a serious health problem.

Studies on the causes of sexual addiction reveal various findings. Although Irvine (1995) suggests that sexual addiction can be addressed as a disturbance that can also stem from deep cultural concerns about sex, demands, individual experiences, and other historical conditions, more research is needed on this topic. Looking at the studies of Schwartz (1995) and Teicher (2002), we can conclude that the changes made by childhood traumas in the hippocampus part of the brain can lead to a kind of stress disorder, and this disorder may lead to sexual addiction. Hall's (2011) study shows that individuals with insecure attachment may not produce enough dopamine. Considering that dopamine is the neurochemical producer of reward and pleasure experiences and it is aroused by eating, drinking and sex (Garcia and Thiabut 2010), we can say that this hypothesis is remarkably reasonable. Considering the qualitative study of Black et al. (1997), it is possible to say that avoiding negative emotions and situations are at the forefront in the causes of sexual addiction, positive emotion seeking also follows them, and that while patients escape from negative emotions, they fall into the clutches of different types of negative emotions and moods.

Sex addiction and compulsive sexual behaviors have been studied in the international literature since the 70's. Although the studies conducted especially after the 2000s have shown extremely important developments in both qualitative and quantitative terms, a limited number of studies on the subject have been made in Turkey after 2010. Therefore, it can be said that approaching problematic sexual behaviors as a psychological disorder is yet at the "birth" stage. In Turkey where social norms and perspective to sex is more "closed" compared to western societies, it is thought that there are many patients who cannot apply to clinics due to the feelings of shame and secrecy. The statistics related to the sexually explicit crimes in Turkey demonstrate that this disorder will cause more pain for more people as long as it is not talked, studied or treated. It is predicted that this situation may worsen with the unlimited access and ease of access to sexual material offered by the technological age. Comprehensive studies to be carried out in our country will initially serve for the acknowledgement of sexual addiction as a psychological disorder, so that these behaviors will be better understood, and progress will be made in terms of treatment.

Every culture, society or region has its own unique traumatic histories. Many studies have demonstrated the relationship between sexual addiction and trauma. (Krupnick and Horowitz 1981, Gold and Heffner 1998, Giugliano 2006, Briken 2007, Hughes, 2010, Hall 2011, Diehl et al. 2018). Consequently, the etiological and longitudinal researches to be conducted in Turkey will create an added value for the literature and will provide an even better understanding of the disorder. For this, students who receive postgraduate education in the fields of psychology and psychological counseling and guidance should be encouraged to do research and write theses on sexual addiction, and more clinical trials should be conducted.

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